

Department of Environmental Quality

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Environmental Cleanup Office

September 30, 2010

Kristine Koch Remedial Project Manager U.S. Environmental Protection Agency 1200 Sixth Avenue, Ste 900, M/S ECL-115 Seattle, WA 98101-3140

RE: Milestone Report for Upland Source Control at the Portland Harbor Superfund Site

Dear Kristine,

Please find enclosed two copies of the DEQ "Milestone Report for Upland Source Control at the Portland Harbor Superfund Site" dated September 2010. The report will also be posted on DEQ's web site within the next two weeks. DEQ will provide hard copies to project partners upon request.

DEQ's "Update on Stormwater Source Control at the Portland Harbor Superfund Site" dated September 2010 is also enclosed. This new update describes DEQ's strategy for achieving stormwater source control and the status and timeline for completing this work.

DEQ continues to be an active partner with EPA in the Portland Harbor project on a number of fronts. In addition to the many source control milestones highlighted below, we continue to be an active partner to EPA in its important work completing the in-water the remedial investigation (RI), feasibility study (FS), and record of decision (ROD); in addition to our support for EPA's early actions and ongoing Natural Resource Damage Assessment (NRDA) work.

As you will see below and in the report, DEQ continues our work with potentially responsible parties (PRPs) in the Harbor, and continues to progress our efforts to identify, evaluate and control sources of contamination in Portland Harbor. Several important source control removal actions have either been recently completed, selected, or are being considered for the near future. In addition to moving forward with source control measures at a number of sites, our focus over this past year has been to ensure each site has a clear path forward to evaluating and controlling sources. Each DEQ project manager identified source control goals at each site and established clear actions, timelines, and agreements to complete them. As a result, we feel confident that all

¹ Milestone Reports are available at www.deq.state.or.us/lq/cu/nwr/PortlandHarbor/jointsource.htm.



Portland Harbor Upland Source Control Milestone Report September 2010

significant sources will be controlled prior to or shortly after EPA's Record of Decision, now anticipated in 2012 or perhaps later.

Significant Achievements

Some of the more significant achievements we've made in Portland Harbor source control in the past year include:

- -Evraz Oregon Steel Mills- Two separate source control efforts are moving forward at the EOSM site. 1st, stormwater is being addressed through a combination of best management practices and end-of-pipe treatment. Phase I of the end-of-pipe treatment. addressing stormwater flow to the northern facility outfall, was installed in 2007 and underwent pilot testing in 2007/2008. Based on the results of the pilot test, the system was expanded to capture stormwater flow going to the central facility outfall in 2008. A Phase II pilot study was conducted in 2009. EOSM will conduct testing to evaluate any toxicity associated with the coagulant they are using followed by a loading evaluation to assess contaminant releases to the Willamette River via stormwater. EOSM is hoping to complete both studies in the 2010/2011 water year, and determine if any further stormwater source control action is necessary. 2nd, riverbank treatment source control measures are in re-design largely to resolve stakeholder concerns regarding mitigation. habitat conservation and restoration, and to incorporate bioengineering components. EOSM plans to re-submit their 404 Permit application in 1st quarter 2011, re-engage natural resource trustee stakeholders in the new design, and construct the riverbank source control measure in 2012 or 2013.
- -Schnitzer Steel- Schnitzer Steel proposed a stormwater management plan in fall 2008. The plan will provide comprehensive management of stormwater including both re-use as on-site process water and end-of-pipe treatment. Phase 1A of the plan calls for abandoning a number of stormwater outfalls, collecting stormwater from most of the site, routing the stormwater thru screen filters to a storage tank, and then either re-using the water or discharging the water under an NPDES permit. The storage tank discharges to the river will be monitored and compared to JSCS SLVs. Additional treatment will be added if necessary. Phase 1A was completed late 2009. Phase 1B consists of paving the Phase 1A construction area. Phase 2 will capture stormwater from several additional on-site drainage basins and route the stormwater to the new filtration and storage system. Phase 2 stormwater improvements are expected to be constructed in fall 2010 and summer 2011. Stormwater basins not captured by the on-site end-of-pipe treatment will be evaluated by the SCE process.
- -Arco/BP- A new permanent seawall sheetpile wall was installed in summer 2007. The sheetpile wall will enhance existing hydraulic control of contaminated groundwater. A riverbank soil and near-shore sediment removal and capping was completed in fall 2008. Approximately 16,000 cubic yards (cy) of petroleum-contaminated soil/sediment were removed and shipped offsite for disposal. The project was completed in summer 2009 by removing the in-river temporary sheetpile wall, final site grading, and planting.
- -Gasco- NW Natural's Gasco site (which includes NW Natural's manufactured gas plant contamination on the Siltronic site) is a High Priority site for upland source control. The distribution and magnitude of upland contamination at the Gasco site is extensive and very significant. Based on an October 2007 Focused Feasibility Study (FFS), DEQ selected a SCM combination consisting of a vertical barrier wall and groundwater pumpand-treat system in the Gasco former tar pond area and pump-and-treat elsewhere along the shoreline. NW Natural recently completed a number of studies to support the design

of this SCM. Based on their studies, NW Natural recommended a revised SCM in summer 2009 for the former tar pond area consisting of only the pump-and-treat component. DEQ has a number of concerns with NW Natural's recommended SCM..., particularly that it will exacerbate exiting conditions by potentially mobilizing manufactured gas plant waste (dense non-aqueous phase liquid) without capturing it. In June 2010, DEQ directed NW Natural to move forward with source control of dissolved phase contamination along approximately 1,300 feet of shoreline and defer source control in the former tar pond area to the upland feasibility study so that source control could be considered comprehensively. DEQ and NW Natural are currently in formal dispute resolution over source control in the former tar pond area. We expect to resolve the dispute in fall 2010.

- -<u>Siltronic</u>- An amended FFS was submitted December 2007 recommending an enhanced insitu bioremediation (EIB) SCM for the Siltronic chlorinated solvent groundwater plume. DEQ selected EIB to be applied in the release area. Siltronic completed application of EIB treatment media in the source area in summer 2008, has recently proposed expanding use of EIB further upgradient of the release area, and is currently monitoring results from the SCM.
- -Arkema- Arkema is working on three separate upland source control efforts at their site. 1st. Arkema submitted an FFS for groundwater/NAPL in summer 2008. DEQ selected a slurry wall/groundwater extraction system as the SCM in 2009, and the SCM is in design. We anticipate SCM construction to begin in summer 2011. 2nd, Arkema submitted a stormwater FFS in summer 2008, DEO selected a stormwater SCM earlier this year and Arkema entered a DEO Water Quality Mutual Agreement and Order in July 2010 to design, construct and monitor a new stormwater system. The stormwater SCM will consist of berming the perimeter of the site to prevent off-site overland flow, temporarily capping higher-level contaminated soil, decommissioning the existing collection and conveyance system including 3 of the 4 existing outfalls, installing a new collection/conveyance system which will route stormwater to a detention pond to reduce the suspended load, and discharging stormwater from the pond through a filter system to the river. Stormwater SCM construction is expected to begin in 2011 and conclude by the end of 2011. 3rd, Arkema evaluated their riverbank and the threat that portion of the site poses to the river. Riverbank source control is anticipated to be incorporated into the EPA-lead in-water Early Action at Arkema. Arkema will evaluate riverbank SCM options in 2010-11.
- -Rhone-Poulenc- The responsible party at Rhone Poulenc, SLLI, is working on three major upland source control/evaluation efforts at their site. 1st, SLLI submitted a comprehensive SCE report in early-2008, DEQ reviewed the report, SLLI will revise the report after collecting significant additional hydrogeologic information to inform the conceptual site model, and submit the revised report in October 2010. 2nd, SLLI pilot tested several SCMs to treat and/or control their most significant groundwater plume threatening the river. SLLI has completed an extensive, long-term groundwater pumping test to support the design of their North Front Avenue SCM which targets contaminated groundwater moving in the highly conductive fractured basalt zone. The pumping test includes a number of extraction wells that could largely comprise the SCM. The pumping test concluded in August 2010. Construction of any supplemental portions of the SCM is anticipated for early 2011. 3rd, SLLI removed accumulated sediment from Outfall 22B stormwater lines and grouted the lines to at least partially prevent contaminated

groundwater from invading the lines. In the second half of 2009, SLLI cleaned out the lines and installed impermeable liners in the stormwater lines to further prevent groundwater invasion. In addition to these three ongoing source control efforts, SLLI: 1) spent two field seasons removing drums and debris from the Doane Lake area, 2) completed an on-site Facility Structures Interim Remedial Action Measure (IRAM); 3) completed the Groundwater Extraction and Treatment System (GETS IRAM) in 2005 designed to capture alluvial zone groundwater in the Herbicide Area; and 4) started the West Doane Lake (WDL IRAM) in 2010 to stabilize and cap West Doane Lake sediments.

Other Recent Achievements

- 1) Collaboration with the City of Portland- DEQ continues to work collaboratively with the City to identify and evaluate stormwater discharges under the Joint Source Control Strategy. DEQ is working closely with the City of Portland to identify upland sources contributing contamination via both the City's municipal stormwater system and private stormwater systems (see Section 2.1 of the report).
- 2) River Mile 11 east Focused Stormwater Investigation- Round 3 Portland Harbor sediment data collected by the LWG identified sediments contaminated by polychlorinated biphenyls (PCBs) on the east side of the river between RMs 11 and 11.3. Subsequent in-river sediment sampling by the City identified elevated PCBs between RMs 11 and 11.5. The current conceptual model is that the sediment contamination is largely due to past releases from historic operations in the area, but that current stormwater and bank erosion pathways may still exist. To evaluate whether there are ongoing stormwater sources, the City implemented a sampling plan in three City stormwater basins discharging into the river between RM 11 and 11.3 (Basins 43, 44, and 44A). Source investigation efforts are presumed to be complete for Basins 44 and 44A and are still underway in the Outfall 43 basin. In Basin 44, PacifiCorp is currently implementing source investigation and control measures to address PCB-contaminated soils and to prevent contaminants from migrating offsite and to the river in stormwater runoff.
- 3) City of Portland's "Stormwater Evaluation Report" (February 2010)- In 2009, the City undertook a comprehensive evaluation of stormwater and sediment trap data collected from City outfall basins to evaluate additional source tracing needs and help shape future data collection objectives. The evaluation included data collected by the City as well as data collected by the LWG and Port of Portland in support of the in-water Remedial Investigation. The findings from this evaluation generally support the City's and DEQ's belief that all major sources within City outfall basins have been identified. However, the results also indicate that additional investigation may be warranted in a small number of basins where slightly elevated concentrations of certain contaminants could not be explained by the known sources/land uses in those basins. A status of the source identification efforts in the City outfall basins as of August 2010 is provided in the Milestone Report.
- 4) **Downtown Portland Sediment Characterization-** DEQ continues our work with the City of Portland and other partners to investigate sediment quality in the Willamette River upstream of the Portland Harbor in downtown Portland. The results of the initial investigation broadened our understanding of the previously existing limited sediment quality data, and allowed us to gain a better understanding of the nature and extent of

hazardous substances in the downtown reach. The first phase of the investigation is completed and summarized in a GSI's 2009 report "Field and Data Report, Downtown Portland Sediment Characterization". DEQ's evaluation of the results can be found in our 2009 report "Downtown Portland Willamette River Sediment Evaluation-Preliminary Identification of Areas of Interest". A focused second phase of the investigation was completed in early 2010. This Phase II sampling was completed to better prioritize areas of interest for follow-up action, lay the foundation for source identification investigations, and in some cases begin to assess contaminant extent. Results from the Phase II work are compiled in GSI's 2010 "Field and Data Report, Downtown Portland Sediment Characterization Phase II". All reports can be viewed at: http://www.deq.state.or.us/lq/cu/nwr/willametteriver.htm

General Status

DEQ believes we have identified all of the significant upland sources threatening the river in the Portland Harbor Study area. All of these sites are under agreement to complete SCE or develop and/or construct SCMs. Where progress has been lagging or delayed, DEQ worked to clarify source control expectations and timing, and provide guidance for expected work.

DEQ continues to primarily focus on completing SCEs and implementing SCMs at High Priority sites. While much work remains to be done, we've made significant progress in all the High Priority sites, and for the majority of the High Priority sites, the stormwater pathway is the only remaining contaminant migration pathway that needs to be evaluated. Furthermore, interim SCMs are in-place in 12 of the 16 High Priority sites.

Focus for the Future

The primary focus for the future will continue to be completing SCEs and implementing SCMs at the Portland Harbor High Priority sites. With our new stormwater guidance, and further refinement of the in-water RI, we should also be able to close out many stormwater pathway sites we are working on. Continued progress at stormwater sites, as well as the implementation of groundwater and bankline remedies will help inform broader source control tools and actions that will be required in order to achieve our shared objectives for a healthy river.

As you review the September 2010 Milestone Report, please contact me or Matt McClincy with any suggestions, comments, or questions.

Portland Harbor Upland Source Control Milestone Report September 2010

Thank you for your continued assistance in coordinating EPA's support to DEQ on Portland Harbor source control work. Please let us know if you would like to convene a meeting with DEQ and interested EPA partners to discuss the September 2010 Milestone Report, including site prioritization and source control progress.

We anticipate submitting the next Milestone Report in March 2011.

Sincerely,

James M Anderson, Manager

Portland Harbor Section

cc: Matt McClincy, DEQ/NWR (without reports)

Chuck Harman, DEQ/NWR (without reports)
Dick Pedersen, DEQ/HQ (without reports)
Nina DeConcini, DEQ/NWR (without reports)

EPA Oregon Operations Office (full report)

Milestone Report

for Upland Source Control at the Portland Harbor Superfund Site

September 2010

Prepared by the Oregon Department of Environmental Quality



This document is posted on DEQ's web page at http://www.deq.state.or.us/lq/cu/nwr/PortlandHarbor/jointsource.htm.

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1.0 Introduction

On December 1, 2000, a section of the lower Willamette River within the City of Portland, the Portland Harbor, was added to the Superfund National Priority List (NPL). In February 2001, the Oregon Department of Environmental Quality (DEQ), United States Environmental Protection Agency (EPA), and other governmental parties isigned a Memorandum of Understanding (MOU) that provided a framework for cooperation in the investigation and cleanup of the Portland Harbor Superfund Site to optimize federal, state, tribal and trustee expertise and available resources.

Under the 2001 MOU, EPA was designated as the Lead Agency for investigating and cleaning up "in-water" contamination in the Harbor, i.e., contamination in the river water and underlying sediment using federal Superfund authorities. DEQ, using state cleanup authority, was designated as the Lead Agency for identifying and controlling "upland" sources of contamination, i.e., those sources of pollution adjacent to or near the river that may be contaminating river water or sediments. To coordinate in-water cleanup and upland source control work, the MOU directed DEQ and EPA to jointly develop a source control strategy that defines a process for identifying and controlling potential sources of contamination threatening the river.

DEQ and EPA finalized the Portland Harbor Joint Source Control Strategy (JSCS) in December 2005². The overarching goal of the JSCS is to identify, evaluate and control sources of contamination that may affect the Willamette River in coordination with the objectives and schedule for the Portland Harbor remedial investigation and feasibility study (RI/FS). Upland source control is necessary to allow cleanup of the river to proceed without risk of significant recontamination. DEQ is currently implementing the JSCS in the Portland Harbor Superfund Site study area – approximately River Mile (RM) 1.9 to River Mile 11.8³.

The JSCS requires DEQ to prepare a Milestone Report on a quarterly basis that summarizes the status of DEQ's upland source control work. The report submittal schedule has been changed to bi-yearly. This is the ninth Milestone Report. Milestone Reports are submitted to EPA, and provide the basis for potential meetings with EPA and our government partners to discuss site prioritization and source control progress. These reports also serve as documentation of progress on river-wide source control within Portland Harbor.

1.1 Organization of the Milestone Report

The Milestone Report is organized as follows.

¹ The signatory partners to the MOU include the EPA, DEQ, Confederated Tribes and Bands of the Yakama Nation, Confederated Tribes of the Grand Ronde Community of Oregon, Confederated Tribes of Siletz Indians, Confederated Tribes of the Umatilla Indian Reservation, Confederated Tribes of the Warm Springs Reservation of Oregon, Nez Perce Tribe, National Oceanic and Atmospheric Administration, Oregon Department of Fish and Wildlife, and U.S. Department of the Interior.

² The JSCS is available on DEQ's web site at http://www.deq.state.or.us/lq/cu/nwr/PortlandHarbor/jointsource.htm ³ "River Mile" indicates the distance from the Willamette River's confluence with the Columbia River (i.e., River Mile 11.8 is 11.8 miles upstream of the confluence).

- Section 2.0: Identifying Potential Sources of Contamination in Portland Harbor This section describes DEQ's work to identify potential sources of contamination to the Willamette River in Portland Harbor, including site discovery and site assessment activities.
- Section 3.0: Evaluating Potential Sources of Contamination to the River This section describes DEQ's status and schedule for the evaluation of all confirmed or suspected upland sources of contamination to Portland Harbor, as summarized in Table 1.
- Section 4.0: Taking Measures to Control Sources and Making Source Control Decisions —
 This section describes the source control measures used at upland sites in Portland Harbor
 and the process for making source control decisions, including coordination with EPA and
 our government partners, and public involvement opportunities. Source control measures and
 decisions are summarized in Table 1.
- Section 5.0: Status of Ongoing and Completed Source Control Activities This section
 describes the information presented in Table 1 that summarizes the status of ongoing and
 completed source control measures. This section also describes the specific status of the 16
 High Priority and Preliminary High Priority sites (Table 2). This section also presents five
 specific source control goals designed to help DEQ focus our efforts to achieve the
 overarching goal of source control.
- Section 6.0: Issues Encountered in Source Control Work This section describes issues affecting DEQ's ability to conduct source control work and identifies paths forward towards resolution.
- Section 7.0: Summary This section summarizes the overall status of source control work in Portland Harbor, highlighting accomplishments, key issues and next steps for moving forward.
- Section 8.0: Obtaining Additional Information on Upland Source Control Work This section indicates where additional information can be found on the status of source control work at upland sites in Portland Harbor.
- Section 9.0: Information on Table 1: Controlling Confirmed or Suspected Upland Sources of Contamination to Portland Harbor – This section provides helpful information for interpreting Table 1, including definition of key terms and acronyms used.

2.0 Identifying Potential Sources of Contamination in Portland Harbor

DEQ's strategy for identifying and investigating potential sources of contamination to Portland Harbor prior to the December 2000 Superfund Site listing was described in the March 2006 Milestone Report. Those site identification and investigation activities were initially focused on a six-mile stretch of the lower Willamette River (now known as the Initial Study Area) extending from the southern tip of Sauvie Island upstream to Swan Island, from approximately River Mile 3.5 to River Mile 9.2. For more information, please see the March 2006 Milestone Report or please contact DEQ's Portland Harbor project manager, Jim Anderson at (503) 229-6825 or anderson.jim@deq.state.or.us

2.1 Recent Site Discovery and Site Assessment activities

As would be expected, DEQ's site discovery/site assessment activities have decreased now that we've reached an intermediate stage of the upland source control effort and the significant sources are being addressed. This is not to say that additional site discovery work won't be necessary, it simply means that we are currently directing our energy toward completing site investigations and source control measures at existing Environmental Cleanup Site Information (ECSI) sites.

There are two main efforts that will help shape DEQ's future site discovery activities. One is the information contained in the Lower Willamette Group's (LWG) Draft Risk Assessment and Remedial Investigation documents and the ongoing process to develop the draft Feasibility Study. It's possible that information from these documents could identify specific areas where additional source identification is warranted.

The second effort involves discovering stormwater sites. New stormwater site discovery efforts tend to be targeted and are triggered by recently collected data. The majority of this work is conducted as a collaborative effort between the City and DEQ under the Intergovernmental Agreement (IGA) between DEQ and the City's Bureau of Environmental Services (BES), to identify, investigate, and control contaminant discharges to shared City stormwater conveyance lines. Over the past two years, the City has undertaken a comprehensive source investigation effort on the east side of the river between RM 11 and 11.3. The City is also undertaking additional source investigations in Outfall Basins 52, 52C and 53 based upon the findings presented in their February 2010 Stormwater Evaluation Report. These efforts are described below.

River Mile 11-East Source Investigations

Round 3 Portland Harbor sediment data collected by the LWG identified sediments contaminated by polychlorinated biphenyls (PCBs) on the east side of the river between RMs 11 and 11.3. Subsequent in-river sediment sampling by the City identified elevated PCBs between RMs 11 and 11.5. The current conceptual model is that the sediment contamination is largely due to past releases from historic operations in the area, but that current stormwater and bank erosion pathways may still exist. To evaluate whether there are ongoing stormwater sources, the City implemented a sampling plan in three City stormwater basins discharging into the river between RM 11 and 11.3 (Basins 43, 44, and 44A). Source investigation efforts are presumed to be complete for Basins 44 and 44A and are still underway in the Outfall 43 basin. In Basin 44, PacifiCorp is currently implementing source investigation and control measures to address PCB-contaminated soils and to prevent contaminants from migrating offsite and to the river in stormwater runoff.

City of Portland's Stormwater Evaluation Report (February 2010)

There are 38 City outfalls in Portland Harbor. As part of the City's 20-year combined-sewer overflows abatement program, to be completed by 2011, all or a portion of the stormwater discharging through fifteen City outfalls are being diverted to the wastewater treatment plant. For basins that will continue to discharge to the river, the City conducted basin evaluations to determine if there was potential for significant sources in the basins. If so, source tracing was conducted to identify sources that need to be controlled through either DEQ or City authorities.

In 2009, the City undertook a comprehensive evaluation of stormwater and sediment trap data collected from City outfall basins to evaluate additional source tracing needs and help shape future data collection objectives. The evaluation included data collected by the City as well as data collected by the LWG and Port of Portland in support of the in-water Remedial Investigation. The findings from this evaluation generally support the City's and DEQ's belief that all major sources within City outfall basins have been identified. However, the results also indicate that additional investigation may be warranted in a small number of basins where slightly elevated concentrations of certain contaminants could not be explained by the known sources/land uses in those basins.

A status of the source identification efforts in the City outfall basins as of August 2010 is provided below. This information is also presented in Figure 1.

August	2010 Status of Source Identification at City Outfalls in Portland Harbo	or
No Significa	ant Sources in Basin and Insignificant or Incomplete Pathway	
19 Outfalls	Outfall Designations: M-2, M-3, S-2, S-5, 10A, 11, 13, 14, 19A, 22D, 23, 24, 42, 44A, 48, 49, 50, 52A	47,
Source Iden	tification in Basin is Complete	
15 Outfalls	Outfall Designations: M-1, S-1, S-6, 15, 16, 17, 18, 19, 22, 22B, 22C, 46, 44, 45, 53A	
Additional S	Source Identification Needed or May be Needed in Basin	
4 Outfalls	Outfall Designations: 43, 52, 52C, 53	

2.2 Downtown Portland Willamette River Sediment Investigation

DEQ continues our work with the City of Portland and other partners to investigate sediment quality in the Willamette River upstream of the Portland Harbor in downtown Portland. The results of the initial investigation broadened our understanding of the previously existing limited sediment-quality data, and allowed us to gain a better understanding of the nature and extent of hazardous substances in the downtown reach. The first phase of the investigation collected surface sediment and/or cores samples from nearly 80 locations.

The field work for the downtown reach sediment investigation was completed in June 2008. Results from this first phase are compiled in the GSI Water Solutions, Inc 2009 report "Field and Data Report, Downtown Portland Sediment Characterization". This report can be viewed at: http://www.deq.state.or.us/lq/cu/nwr/willametteriver.htm

DEQ completed a review of this first phase of the investigation. The results of the review are found in a 2009 DEQ report entitled "Downtown Portland Willamette River Sediment Evaluation-Preliminary Identification of Areas of Interest." A focused second phase of investigation was completed in early 2010. This Phase II sampling was completed to better prioritize areas of interest for follow-up action, lay the foundation for source identification investigations, and in some cases begin to assess contaminant extent. Results from the Phase II

work are compiled in GSI's 2010 "Field and Data Report, Downtown Portland Sediment Characterization Phase II". All reports can be viewed at: http://www.deq.state.or.us/lq/cu/nwr/willametteriver.htm

DEQ is evaluating the investigation results for both phases of work to help assess area-wide contaminant levels and identify areas where source identification efforts are warranted.

Within the downtown reach, PGE is conducting an investigation of in-water sediment and upland source control between RM 13.1 -13.5 east. Two upland preliminary assessments and data reports from three upland investigations and the in-water sediment investigation have been completed in 2010. A remedial investigation covering both in-water and upland data is due in late-2010. This information will help determine potential remedial and source control actions.

The Zidell Waterfront property is located at the upstream edge of the downtown reach on the west side of the river beneath the Ross Island Bridge. The ZRZ Realty Company (Zidell Company) and other site operators conducted ship dismantling, ship building, welding, and other miscellaneous industrial activities at the site from approximately 1925 to the mid-1960s. The Zidell Company began on-site barge-building operations in 1968 and those activities continue today. Portions of the upland property are impacted by releases of metals, petroleum hydrocarbons, PCBs, asbestos, and other contaminants. The Zidell Company is working under a DEQ consent judgment to cleanup contaminated upland soil and Willamette River sediment adjacent to their property. The Zidell Company initiated upland soil cleanup this summer, and plans to begin sediment remediation summer 2011.

3.0 Evaluating Potential Sources of Contamination to the River

DEQ is investigating or directing source control work at over 60 upland sites in Portland Harbor. Preliminary investigation activities at these sites are designed to determine whether the site is a potential or ongoing source of contamination to the river. These investigations, or "source control evaluations," consider all potential, current and historic contaminant sources and current or reasonably likely future contaminant migration pathways for the contaminants to be transported to the river. Potential pathways include:

- Direct discharges Pollutants from commercial, industrial, private or municipal outfalls have in the past and continue to be discharged directly to the Portland Harbor Superfund Site.
 Levels of contaminants in historic discharge streams were much greater than recent and current loads due to better environmental awareness and government controls (e.g., permits. Many current discharges are permitted (general or individual permits) under the Clean Water Act National Pollutant Discharge Elimination System (NPDES). Permitted discharges include industrial wastes, stormwater runoff, and combined-sewer overflows (CSOs)⁴.
- Groundwater Contaminated groundwater may enter the river directly via discharge through sediments, bank seeps, or it may infiltrate into storm drains/pipes, ditches or creeks that

⁴ CSO events are untreated discharges of combined stormwater, sanitary sewage from residential, commercial, and industrial sources that overflow from the sewer system into the river during heavy rainfall periods when the amount of stormwater and sewage exceeds the capacity of the collection system.

discharge to the river. Contaminant migration may occur as non-aqueous phase liquids (NAPLs) or as chemicals dissolved in the groundwater itself.

- Stormwater Contaminants may be carried to the river by water that runs off a site into storm drains after it rains, delivered to the river by stormwater pipes (including permitted and unpermitted stormwater discharges).
- Overland transport/sheet flow The uncontrolled flow of water from a site to the river and the transport of other materials from a site may deliver contaminants to the river.
- Bank erosion/leaching River bank soil, contaminated fill, waste piles, landfills and surface impoundments may release contaminants directly to the river through erosion, via soil erosion to stormwater, or by leaching to groundwater.
- Overwater activities Contaminants from overwater activities (e.g., sandblasting, painting, unloading, maintenance, repair and operations) at riverside docks, wharves, or piers; discharges from vessels (e.g., gray, bilge, ballast waters); full releases; and spills may affect the river.

These potential contaminant migration pathways are evaluated for each site, and upland contaminant concentrations are screened against conservative screening level values (SLVs) protective of human health and the environment. Sites that are identified as significant current or potential sources of pollution to the river are characterized and prioritized. Based on the resulting priority, either further source control evaluation is completed or source control measures are initiated.

Table 1 provides a summary of confirmed and suspected upland sources of contamination to the river that DEQ is either actively working on or has finished source control work on by issuing a final source control decision. Table 1 also provides the basis for the determination that a site is a source of contamination to the river, the status of and schedule for source control evaluation, and the priority of the site for source control. The table includes the priority of each contaminant migration pathway for each site, as well as the overall priority of the site based on the pathway priorities.

High priority sites are identified in the table based on existing site information, and subsequent Milestone Reports will identify any new high priority sites as new information becomes available. Source control is expected to move forward at high priority sites without delay.

4.0 Taking Measures to Control Sources and Making Source Control Decisions

DEQ determines the need for source control measures at each upland site, in consultation with EPA, based on the completeness of contaminant migration pathways, exceedances of SLV, and other factors as appropriate. See p. 3-1 through 3-6 of the JSCS for more information about SLVs, and p. 4-1 through 4-10 of the JSCS for more information about the source control decision process.

4.1 Types of source control measures

Upland source control is an iterative process where early steps may be revisited and conclusions refined by information gathered later in the process. A combination of tools may be used to control a source, including but not limited to the following.

- <u>Technical assistance</u> Technical assistance, often provided during inspections, provides technical information designed to help individual businesses bring their facilities into compliance with environmental regulations. DEQ's Hazardous Waste Program has and continues to provide technical assistance to facilities within the Portland Harbor Superfund Site area.
- <u>Cleaning-up contaminated upland areas</u> Cleanup work addresses contaminated soil, groundwater, stormwater and other sources; and focuses on reducing or eliminating contaminant migration to the river. Common source control measures include removing highly contaminated soil areas, stabilizing or capping contaminated bank areas, treating or containing contaminated groundwater, and extracting contaminated sediment from storm sewer systems. Source control measures vary from site to site.
- <u>Source control of active discharges</u> Tools to control active discharges include best management practices (BMPs), industrial process changes, pollution prevention practices, and technology-based effluent controls. Compliance is achieved voluntarily or through administrative actions, including permits or enforcement.
- Source control of stormwater Stormwater source control is complex because storm drain systems capture discharges from many different sources (e.g., land use activities, runoff from contaminated sites, and infiltration of contaminated groundwater into the storm drain system). Stormwater regulation also involves state and local agencies implementing MS4 and 1200Z general stormwater permits. Because of this complexity, all of the tools described above are useful for stormwater source control and will be used as appropriate.
- Administrative actions and enforcement Administrative actions include licenses, permits, deed restrictions, requirements for site development plans, and enforcement actions; which may be necessary when administrative actions are violated. Agencies rarely take enforcement actions without first conducting an inspection and documenting findings, requested changes, warnings and offers of technical assistance. When enforcement actions are warranted, they are usually taken in escalating order, starting with notices of violation, moving to enforcement or compliance orders requiring specific changes by a set date, and ending with monetary penalties, court action or DEQ's takeover of investigation or cleanup work. Formal cleanup actions performed under an order or decree use oversight and enforcement to ensure that appropriate actions are taken in a timely manner.

Table 1 summarizes source control decisions at upland sites, the basis for the determination that upland source control measures are necessary, a summary of the selected source control measure(s), and a schedule for implementing the source control measure(s). Figure 2-a-c displays most sites listed in Table 1.

4.2 DEQ coordination with EPA and partners on source control decisions

As the Lead Agency for identifying and controlling sources of upland contamination threatening the river in Portland Harbor, DEQ coordinates with EPA and our government partners on source control work. This includes documenting, tracking and coordinating source control efforts as described in Sections 2.5 and 7 of the JSCS.

DEQ provides EPA and our partners an opportunity to review and comment on source control decisions prior to being finalized. These decisions typically fall into the following three categories.

- DEQ determined that a site is not a current or future significant source of contaminants to Portland Harbor and that no source control measures are required.
- DEQ selected the source control measures for a site.
- DEQ concluded that source control at a site is complete, or in the case of systems that require operation and maintenance (e.g., hydraulic containment), that the source control action is effective.

DEQ informs EPA and our partners of pending source control decisions and the schedule for review, and provides copies of source control decision documentation to EPA and partners upon request. EPA and partners have 30 days to provide comments to DEQ on source control decisions.

In addition to this regular review and comment process, some upland sites in Portland Harbor may warrant closer coordination between DEQ, EPA, and our partners for source control (e.g., the Gasco site and potential source control measures for the chlorinated solvent groundwater plume at the Siltronic site). In these instances, DEQ and EPA source control coordinators will develop project-specific coordination strategies.

4.3 Public involvement in source control decisions

DEQ Cleanup Program statutes and rules require that a public notice and comment opportunity be provided prior to DEQ's selection of a final site cleanup remedy and before DEQ determines that the cleanup is complete. For upland Portland Harbor cleanup projects, this means that DEQ issues a public notice and seeks public comments on the recommended final site cleanup strategy. Once public input is considered, DEQ's final decision is typically documented in a Record of Decision (ROD) for the site. For most sites, the upland DEQ ROD includes elements that address both source control for Portland Harbor and cleanup actions specific to areas of upland contamination that are not related to pollution in the Harbor.

Many of the source control measures implemented at upland sites are conducted prior to the selection of the final upland site-wide remedy. While public notice and comment is not required for these "interim" removal actions under DEQ statutes and rules, DEQ typically issues a public notice and seeks public comments when the action is likely to be a substantive piece of the final site remedy, or as the DEQ project manager determines is appropriate.

DEQ does not typically seek public comments for small-scale interim source control measures and time-critical actions. Project managers will, however, issue notices and/or press releases as appropriate to let the public know that the activity is being conducted.

5.0 Status of Ongoing and Completed Source Control Activities

Table 1 summarizes the status of ongoing source control activities; including source control evaluations (SCEs), source control decisions (SCDs), and source control measures (SCMs). Table 1 also provides information on source control activities completed to date, proposed SCM activities, and a target schedule for completion.

Table 1 also summarizes completed SCMs and provides the date that the SCM was completed, the date of EPA review and comment, and any operation and maintenance requirements associated with the SCM.

As of September 2010, the DEQ categorized 90 sites (see Table 1) into the following source control categories:

High Priority Sites- 11
Preliminary High Priority Sites- 5
Medium Priority Sites- 24
Low Priority Sites- 23
Priority "To Be Determined" Sites- 3
Sites with Source Control Decisions- 24

The status of High Priority and Preliminary High Priority sites is presented in Table 2. Twelve of the 16 High Priority sites currently have at least interim SCMs in place. Some of the more important actions in-place or anticipated at the High Priority sites include:

-Evraz Oregon Steel Mills- Two separate source control efforts are moving forward at the EOSM site. 1st, stormwater is being addressed through a combination of best management practices and end-of-pipe treatment. Phase I of the end-of-pipe treatment. addressing stormwater flow to the northern facility outfall, was installed in 2007 and underwent pilot testing in 2007/2008. Based on the results of the pilot test, the system was expanded to capture stormwater flow going to the central facility outfall in 2008. A Phase II pilot study was conducted in 2009. EOSM will conduct testing to evaluate any toxicity associated with the coagulant they are using followed by a loading evaluation to assess contaminant releases to the Willamette River via stormwater. EOSM is hoping to complete both studies in the 2010/2011 water year, and determine if any further stormwater source control action is necessary. 2nd, riverbank treatment source control measures are in re-design largely to resolve stakeholder concerns regarding mitigation. habitat conservation and restoration, and to incorporate bioengineering components. EOSM plans to re-submit their 404 Permit application in 1st quarter 2011, re-engage natural resource trustee stakeholders in the new design, and construct the riverbank source control measure in 2012 or 2013.

-Schnitzer Steel- Schnitzer Steel proposed a stormwater management plan in fall 2008. The plan will provide comprehensive management of stormwater including both re-use as onsite process water and end-of-pipe treatment. Phase 1A of the plan calls for abandoning a number of stormwater outfalls, collecting stormwater from most of the site, routing the stormwater thru screen filters to a storage tank, and then either re-using the water or discharging the water under an NPDES permit. The storage tank discharges to the river will be monitored and compared to JSCS SLVs. Additional treatment will be added if necessary. Phase 1A was completed late 2009. Phase 1B consists of paving the Phase 1A construction area. Phase 2 will capture stormwater from several additional on-site

drainage basins and route the stormwater to the new filtration and storage system. Phase 2 stormwater improvements are expected to be constructed in fall 2010 and summer 2011. Stormwater basins not captured by the on-site end-of-pipe treatment will be evaluated by the SCE process.

- -Arco/BP- A new permanent seawall sheetpile wall was installed in summer 2007. The sheetpile wall will enhance existing hydraulic control of contaminated groundwater. A riverbank soil and near-shore sediment removal and capping was completed in fall 2008. Approximately 16,000 cubic yards (cy) of petroleum-contaminated soil/sediment were removed and shipped offsite for disposal. The project was completed in summer 2009 by removing the in-river temporary sheetpile wall, final site grading, and planting.
- -Gasco- NW Natural's Gasco site (which includes NW Natural's manufactured gas plant contamination on the Siltronic site) is a High Priority site for upland source control. The distribution and magnitude of upland contamination at the Gasco site is extensive and very significant. Based on an October 2007 Focused Feasibility Study (FFS), DEQ selected a SCM combination consisting of a vertical barrier wall and groundwater pumpand-treat system in the Gasco former tar pond area and pump-and-treat elsewhere along the shoreline. NW Natural recently completed a number of studies to support the design of this SCM. Based on their studies, NW Natural recommended a revised SCM in summer 2009 for the former tar pond area consisting of only the pump-and-treat component. DEQ has a number of concerns with NW Natural's recommended SCM.... particularly that it will exacerbate exiting conditions by potentially mobilizing manufactured gas plant waste (dense non-aqueous phase liquid) without capturing it. In June 2010, DEQ directed NW Natural to move forward with source control of dissolved phase contamination along approximately 1,300 feet of shoreline and defer source control in the former tar pond area to the upland feasibility study so that source control could be considered comprehensively. DEQ and NW Natural are currently in formal dispute resolution over source control in the former tar pond area. We expect to resolve the dispute in fall 2010.
- -Siltronic- An amended FFS was submitted December 2007 recommending an enhanced insitu bioremediation (EIB) SCM for the Siltronic chlorinated solvent groundwater plume. DEQ selected EIB to be applied in the release area. Siltronic completed application of EIB treatment media in the source area in summer 2008, has recently proposed expanding use of EIB further upgradient of the release area, and is currently monitoring results from the SCM.
- -Arkema is working on three separate upland source control efforts at their site. 1st, Arkema submitted an FFS for groundwater/NAPL in summer 2008. DEQ selected a slurry wall/groundwater extraction system as the SCM in 2009, and the SCM is in design. We anticipate SCM construction to begin in summer 2011. 2nd, Arkema submitted a stormwater FFS in summer 2008, DEQ selected a stormwater SCM earlier this year and Arkema entered a DEQ Water Quality Mutual Agreement and Order in July 2010 to design, construct and monitor a new stormwater system. The stormwater SCM will consist of berming the perimeter of the site to prevent off-site overland flow, temporarily capping higher-level contaminated soil, decommissioning the existing collection and conveyance system including 3 of the 4 existing outfalls, installing a new collection/conveyance system which will route stormwater to a detention pond to reduce the suspended load, and discharging stormwater from the pond through a filter system to

the river. Stormwater SCM construction is expected to begin in 2011 and conclude by the end of 2011. 3rd, Arkema evaluated their riverbank and the threat that portion of the site poses to the river. Riverbank source control is anticipated to be incorporated into the EPA-lead in-water Early Action at Arkema. Arkema will evaluate riverbank SCM options in 2010-11.

-Rhone-Poulenc- The responsible party at Rhone Poulenc, SLLI, is working on three major upland source control/evaluation efforts at their site. 1st, SLLI submitted a comprehensive SCE report in early-2008, DEO reviewed the report, SLLI will revise the report after collecting significant additional hydrogeologic information to inform the conceptual site model, and submit the revised report in October 2010. 2nd, SLLI pilot tested several SCMs to treat and/or control their most significant groundwater plume threatening the river. SLLI has completed an extensive, long-term groundwater pumping test to support the design of their North Front Avenue SCM which targets contaminated groundwater moving in the highly conductive fractured basalt zone. The pumping test includes a number of extraction wells that could largely comprise the SCM. The pumping test concluded in August 2010. Construction of any supplemental portions of the SCM is anticipated for early 2011. 3rd, SLLI removed accumulated sediment from Outfall 22B stormwater lines and grouted the lines to at least partially prevent contaminated groundwater from invading the lines. In the second half of 2009, SLLI cleaned out the lines and installed impermeable liners in the stormwater lines to further prevent groundwater invasion. In addition to these three ongoing source control efforts, SLLI: 1) spent two field seasons removing drums and debris from the Doane Lake area, 2) completed an on-site Facility Structures Interim Remedial Action Measure (IRAM); 3) completed the Groundwater Extraction and Treatment System (GETS IRAM) in 2005 designed to capture alluvial zone groundwater in the Herbicide Area; and 4) started the West Doane Lake (WDL IRAM) in 2010 to stabilize and cap West Doane Lake sediments.

DEQ developed five specific goals for our source control efforts. These goals will track DEQ source control efforts to achieve the overarching goal of source control: to identify, evaluate and control sources of contamination that may affect the Willamette River in coordination with the objectives and schedule for the Portland Harbor RI/FS.

The goals described below are aggressive goals that were based on an anticipated ROD date of 2010. While much progress has been made to reach these goals, some remain outstanding. Some of the reasons these goals have not been achieved include the complexity of the work, work load for both DEQ and upland responsible parties, and obstacles in implementing the work. While all the goals have not been met, DEQ believes these sites remain on-track to achieve source control at the High Priority sites by the time of the Portland Harbor ROD. The Portland Harbor ROD is now optimistically anticipated to be completed in late-2012. Dates for the goals below have been adjusted to better reflect the current status and the new anticipated ROD date.

Goals and Status for High Priority Sites

Goal 1- Source Control Evaluations (SCE) completed at all High Priority sites by 1/1/10.

Goal 1 Status as of 9/10

-2 of 16 SCEs completed

- -2 of 16 SCEs currently under review by DEQ, to be completed in 2010
- -5 of 16 SCEs to be completed in 2010
- -Of the 7 remaining High Priority sites (16 minus 9) that are either not completed or are not on schedule to be completed by the end of 2010, stormwater is the only outstanding pathway to be completed in 4 of the 7 sites.

<u>Goal 2</u>- SCMs selected at all High Priority sites by 7/1/10.

Goal 2 Status as of 9/10

- -Interim or final SCMs have been selected and have been implemented at 12 of 16 sites. These sites include: 1) EOSM (stormwater), 2) Schnitzer Steel (stormwater), 3) Kinder Morgan Linnton (groundwater), 4) Exxon/Mobil (groundwater), 5) Arco/BP (groundwater and riverbank/beach), 6) MarCom South (overland runoff), 7) Siltronic (groundwater), 8) Rhone Poulenc (groundwater and stormwater), 9) Arkema (groundwater), 10) Willbridge (groundwater), 11) Gunderson (groundwater), and 12) City Stormwater (line cleanouts).
- -Selection of SCMs at other High Priority sites is anticipated over the next 6-12 months. For instance, 1) DEQ selected a significant SCM at the Gasco site in March 2008. NW Natural completed a series of field efforts designed to support the detailed design of this SCM, a vertical barrier wall/groundwater extraction well system. NW Natural proposed a revised SCM in their 11/09 Interim Design Report, and DEQ and NW Natural are currently in formal dispute resolution over the next steps in source control and the upland RI/FS. We expect the dispute to be resolved in fall 2010..., 2) EOSM has further characterized the nature and extent of riverbank contamination, produced initial designs, and has been in negotiation with the Corps and natural resource trustees for the construction of riverbank treatment SCM at their facility. Construction of that river bank SCM is expected to begin in 2011 or 2012...., 3) late-2009 construction of an end-of-pipe stormwater filtration, storage and reuse at the Schnitzer Steel site. Schnitzer Steel is currently expanding the area of their facility that drains into the stormwater reuse/treatment system..., 4) DEQ recently selected a vertical barrier wall/groundwater extraction wells system as a groundwater/NAPL SCM for the Arkema site. The SCM is currently in final design and construction is scheduled to begin in 2011. DEQ also recently selected a stormwater SCM for the Arkema site. The stormwater SCM is currently in design and construction is expected to begin in 2011.

Goal 3- SCMs constructed and effectively operating at all High Priority sites by 1/1/12.

Goal 3 Status as of 9/10

-5 of 16 sites have effective groundwater SCMs operating. These 5 sites include: 1) Exxon/Mobil, 2) Gunderson, 3) Willbridge, 4) Arco/BP, and 5) Siltronic.

Goals and Status for Medium and Low Priority Sites

Goal 4- SCE completed at all Medium and Low Priority sites by 1/1/11

Goal 4 Status as of 9/10

-Two of the 24 Medium Priority sites currently have completed SCEs..., 10 of the 24 sites have interim source control measures in-place..., and 7 of the 24 sites are on schedule to be completed in 2010. Two of the 23 Low Priority sites currently have

completed SCEs..., 13 of the 23 have interim source control measures in-place..., and 7 of the 23 sites are on schedule to be completed in 2010.

Goals and Status for Priority "To Be Determined (TBD)" Sites

Goal 5- Completed prioritization at all TBD sites by 1/1/10.

Goal 5 Status as of 9/10

- -2 of the 3 sites are EPA-lead sites (Vanwaters-&-Rogers & US Moorings).
- -Koppers is the one last TBD site.

6.0 Issues Encountered in Source Control Work

This section summarizes issues affecting DEQ's completion of source control work. This section also presents the steps DEQ is taking to resolve the issues and complete source control work.

<u>Issue 1: Moving projects through the source control process</u>

Certain DEQ Portland Harbor cleanup projects are not proceeding through the source control process at an acceptable pace. There continues to be a number of reasons for the lack of adequate progress at these sites, including: complexity of the site, limited DEQ staff resources, uncertainty regarding liability/responsibility for the needed environmental work, reluctance of the responsible party to move forward, and economic strains on many of the responsible parties. Source control activities at these sites need to be accelerated in order to identify, evaluate and control upland contaminant sources before the Portland Harbor ROD. Moving High Priority sites forward has been an ongoing issue for DEQ. We are focusing our attention on these sites and working with the upland responsible parties to move these projects forward. Two of these sites include:

• Burgard Industrial Park

Problem: At one time, Schnitzer Investment Corporation (SIC) owned the roughly 200-acre Burgard Industrial Park (BIP) that partially surrounds the International Terminals Slip at RM 4. A number of tenants leased properties in BIP. Over the past several years, SIC sold much of the BIP, including approximately 81 acres to Schnitzer Steel in May 2005. Schnitzer Steel operates their scrap metal recycling yard and marine terminal on property sold in 2005. DEQ now understands SIC currently owns approximately 21.5 acres of the BIP. SIC entered into a DEQ Voluntary Agreement in 2000 to perform a remedial investigation and source control measures for BIP. Since signing the agreement, DEQ and SIC have focused on the Schnitzer Steel portion of the BIP area. DEQ recently requested SIC conduct SCE in BIP outside the Schnitzer Steel site. SIC initially declined our request stating that since SIC didn't have access rights to the property they sold, and SIC would not be able to perform SCE for the portions which have been sold.

Path to resolving and Progress Made since the December 2009 Milestone Report: SIC has now agreed in concept to conduct stormwater source control evaluations at BIP, and DEQ and SIC are negotiating a scope of work and implementation schedule for that work. However, that scope of work and implementation schedule has not been finalized.

GS Roofing

<u>Problem:</u> The DEQ project manger overseeing work at GS Roofing left DEQ in 2007, and the vacant position was not filled in a timely manner due to agency budget constraints. This,

and continuing staff-resource challenges has affected the progress of source control work at the site.

<u>Path to Resolving</u>: DEQ made GS Roofing site a priority for staffing and accelerated source control work. GS Roofing conducted independent investigations of the facility. The next step in the project is for DEQ to review this information and provide direction regarding what additional work is required and a schedule for this work. DEQ assigned a new project team to the GS Roofing project in early 2009.

<u>Progress made since December 2009 Milestone Report</u>: GS Roofing completed a stormwater system characterization effort and implemented several BMPs in response to the findings. The stormwater SCE report is expected to be completed in early 2011. The responsible party is developing a scope of work for the remaining elements of a comprehensive SCE.

<u>Issue 2</u>: Completing source control at the Gasco site

NW Natural's Gasco site (which includes NW Natural's manufactured gas plant contamination on the adjoining Siltronic property) is a High Priority site for upland source control. The distribution and magnitude of upland contamination at the Gasco site is extensive and very significant. Based on an October 2007 Focused Feasibility Study, DEO selected a SCM combination consisting of a vertical barrier wall and groundwater pump-and-treat system in the Gasco former tar pond area and pump-and-treat elsewhere along the shoreline. NW Natural recently completed a number of studies to support the design of this SCM. Based on their studies, NW Natural recommended a revised SCM in summer 2009 for the former tar pond area consisting of only the pump-and-treat component. DEQ has a number of concerns with NW Natural's recommended SCM..., particularly that it will exacerbate exiting conditions by potentially mobilizing manufactured gas plant waste (dense non-aqueous phase liquid) without capturing it. In June 2010, DEQ directed NW Natural to move forward with source control of dissolved phase contamination along approximately 1,300 feet of shoreline and defer source control in the former tar pond area to the upland feasibility study so that source control could be considered comprehensively. DEO and NW Natural are currently in formal dispute resolution over source control in the former tar pond area. We expect to resolve the dispute in fall 2010.

Issue 3: Completing source control at the Arkema site

As stated in Section 5, Arkema is working on three separate upland source control efforts at their site. 1st, Arkema submitted an FFS for groundwater/NAPL in summer 2008. DEQ selected a slurry wall/groundwater extraction system as the SCM in 2009, and the SCM is in design. We anticipate SCM construction to begin in summer 2011. 2nd, Arkema submitted a stormwater FFS in summer 2008, DEQ selected a stormwater SCM earlier this year and Arkema entered a DEQ Water Quality Mutual Agreement and Order in July 2010 to design, construct and monitor a new stormwater system. The stormwater SCM will consist of berming the perimeter of the site to prevent off-site overland flow, temporarily capping higher-level contaminated soil, decommissioning the existing collection and conveyance system including 3 of the 4 existing outfalls, installing a new collection/conveyance system which will route stormwater to a detention pond to reduce the suspended load, and discharging stormwater from the pond through a filter system to the river. Stormwater SCM construction is expected to begin in 2011 and conclude by the end of 2011. 3rd, Arkema evaluated their riverbank and the threat that portion of the site poses to the river. Riverbank source control is anticipated to be incorporated into the

EPA-lead in-water Early Action at Arkema. Arkema will evaluate riverbank SCM options in 2010-11.

<u>Issue 4: DEQ staff resource limitations</u>

Limited staff resources continue to affect DEQ's ability to conduct and complete source control work in Portland Harbor. Current and projected future state budget estimates continue to challenge DEQ. Over the last several years DEQ hired four new project managers and a GIS Coordinator to work on Portland Harbor projects and other projects. DEQ continually looks at staff work load and develops priorities to address the most important work. DEQ will continue Portland Harbor source control efforts focusing on the most significant and potentially significant upland sources.

Issue 5: Stormwater evaluation and control

Stormwater pathway evaluations are a relatively new and evolving effort for DEQ's Cleanup Program. In January 2009, DEQ issued its *Guidance for Evaluating the Stormwater Pathway at Upland Sites*. The guidance is currently being updated and this version will be available in October 2010 on DEQ's Portland Harbor website at: http://www.deq.state.or.us/lq/cu/stmwtrguidance.htm

The updates to the guidance are intended to accomplish two objectives:

- 1. Make minor revisions to the text to clarify decision-making criteria.
- 2. Add a tool for evaluating stormwater data. This tool is described below.

Using the sizeable stormwater dataset generated by Portland Harbor investigations, DEQ developed a tool to assist with data interpretation. The tool can be used to help distinguish "typical" concentrations of contaminants in industrial stormwater from "elevated" concentrations that may indicate an uncontrolled source of contamination at a site. This distinction is important because it helps to determine the type of response warranted at the site. In general, stormwater discharges related to "normal" industrial operations are managed with stormwater Best Management Practices (BMPs) and, where appropriate, are regulated under Water Quality permits. If an uncontrolled contaminant source is suspected, it may be appropriate to invoke Cleanup Program regulations to conduct additional investigation and source control measures.

7.0 Summary

DEQ is making significant progress in controlling sources of contamination to the lower Willamette River in Portland Harbor, and is coordinating resources of its Cleanup, Hazardous and Solid Waste, Water Quality and Spills Programs to achieve upland source control objectives by the expected time of the Portland Harbor Record of Decision or shortly after. To date, DEQ has identified 90 upland sites that may be potential sources of contaminants in Portland Harbor, and most of these sites have been prioritized for additional investigation or source control. Additionally, DEQ evaluated a number of sites in our site discovery process throughout the Portland Harbor project and concluded these sites do not threaten the river.

As of September 2010, the DEQ categorized 90 sites (see Table 1) into the following source control categories:

High Priority Sites-11
Preliminary High Priority Sites-5
Medium Priority Sites-24
Low Priority Sites-23
Priority To Be Determined Sites-3
Sites with Source Control Decisions-24

DEQ will submit a Milestone Report to EPA twice a year, with the next Milestone Report scheduled for March 2011, and update Table 1 and Table 2 with the current status of source control work at all upland sites. For more information about the Milestone Report or DEQ's source control work generally, please contact Jim Anderson, DEQ Portland Harbor Project Manager, at (503) 229-6825, or anderson.jim@deq.state.or.us.

8.0 Obtaining Additional Information on Upland Source Control Work

For more information on DEQ's source control work at any of the sites listed in Table 1, see DEQ's Portland Harbor web page

(http://www.deq.state.or.us/lq/cu/nwr/PortlandHarbor/index.htm)

and click on "Upland Sites map" in the right hand corner. This link provides a map showing all Portland Harbor upland sites and summary reports of the status of source control work. Just open the map and click on the site you are interested in to connect to DEQ's Environmental Cleanup Site Information (ESCI) database, which houses current information on work at each site.

Alternatively, contact the DEQ project manager (PM) that is leading work on the site you are interested in. Contact information for each DEQ PM is listed on the last page of this report.

For more information on the status work on the Portland Harbor Superfund Site, see EPA's Portland Harbor web page (http://yosemite.epa.gov/r10/cleanup.nsf/sites/ptldharbor).

9.0 Information about Table 1: Controlling Confirmed or Suspected Upland Sources of Contamination to Portland Harbor

The purpose of Table 1, entitled Controlling Confirmed or Suspected Upland Sources of Contamination to Portland Harbor, is to track and share information on the status of DEQ's efforts to evaluate and control sources of pollution to the Willamette River in Portland Harbor. The table provides information on each upland site that DEQ is working on in the Harbor, including the status of evaluations to determine whether source control is needed, the progress of source control measures, and the status of source control decisions and EPA review. Below is some helpful information for interpreting the table, including definitions for key terms and acronyms.

Site Information and Project Status

The first columns of Table 1 provide basic background information on each site, including:

• the name of the site,

- the site's reference number for DEQ's Environmental Cleanup Site Information (ESCI) database,
- the location of the site (river mile and address),
- the DEQ project manager that is leading source control work,
- the type of agreement DEQ is using to direct cleanup activities at the site (i.e., Intergovernmental Agreement, Portland Harbor Agreement, Unilateral Order, etc.), and
- the status of work occurring at the site (i.e., Preliminary Assessment, Remedial Investigation, completed Source Control Decision, Remedial Design/Remedial Action, etc.).

Sites are listed in Table 1 based on their position alongside the Willamette River, or the "River Mile" associated with their location. The River Mile indicates distance of the site from the Willamette River's confluence with the Columbia River. Sites associated with a lower river mile occur downstream of sites with a higher river mile.

Sites listed in Table 1 are those in Portland Harbor at which DEQ is actively overseeing upland investigation or source control actions, or for which source control decisions have been made. DEQ updates the site information in ECSI when a Strategy Recommendation is made, but a site is not added to Table 1 until active oversight of the project is provided by DEQ.

Source Control Evaluation

The Source Control Evaluation (SCE) columns in Table 1 provide information on the status of DEQ's work to evaluate the need for source control measures, including the status of SCE for each potential pathway, the schedule for completing SCE, the basis for determining whether source control measures are needed, and the status of EPA review.

Potential pathways

Six standard pathways represent the major potential pathways that contaminants could follow to reach the river from an upland site. These pathways include:

- overland transport/sheet flow the uncontrolled flow of water and other material to the river from a site
- bank erosion erosion of material within the sloping bank areas of the site to the river
- groundwater groundwater plumes or discharges to the river via seeps or through preferential pathways
- stormwater stormwater discharges to the river that originate from a pipe or stormwater system, including unpermitted stormwater discharges and discharges under a DEQ general stormwater permit
- overwater activities the storage or use of hazardous substances over the water (i.e., storage tanks on docks, permanent work activities conducted over water), that if released would be a potential current or future source of contamination to the river; pipelines and other conveyance systems are not considered in this category, releases from these types of systems are reported to the Oregon Emergency Response System (OERS) system for clean up
- other may include permitted wastewater discharges, individually permitted stormwater discharges, air deposition or other pathways

Each of these standard pathways appears for each site in Table 1 to track SCE work on a pathway-specific basis.

Basis for determining the need for source control

DEQ evaluates each of the pathways listed above to determine the need for source control measures. DEQ makes this determination based on: (1) whether contaminants are present and whether the pathway is capable of carrying them to the river (if it is, the pathway is called "complete"); and if a complete pathway exists, (2) whether it is carrying contaminants to the river at concentrations that exceed the Screening Level Values (SLVs) provided in the Joint Source Control Strategy (JSCS)⁵.

Three general examples are provided below.

- Example 1: Initial investigations of a site that is adjacent to the river indicate that bank soils have the potential to erode and carrying contaminants into the river. DEQ oversees a SCE to determine whether contaminants are in fact present in the bank soils and whether the eroded bank soils are carrying or could carry those contaminants into the river. The SCE concludes that contaminants are present in the bank soils and the soils are carrying contaminants into the river; the pathway is deemed "complete." The SCE then determines whether the bank soils are carrying or could carry contaminants to the river at concentrations that exceed the SLVs in the JSCS. If they are or could carry contaminants to the river at concentrations exceeding SLVs, DEQ determines that source control measures may be needed and assigns a priority of high or medium to the pathway based on the degree of SLV exceedance (see "Priority levels for each pathway and site" below for more information on the priority levels). If it is a high priority, then the RP should move forward aggressively evaluating, designing, and implementing SCMs. If it is medium priority, then the RP should use the weight-of-evidence approach to determine if further SCE is needed or if SCMs are needed.
- Example 2: Initial investigations of a site adjacent to the river indicate that groundwater has the potential to migrate toward the river and carry contaminants. DEQ oversees a SCE to determine whether contaminants are present in the groundwater and whether the groundwater is carrying or could carry those contaminants into the river. The SCE concludes that groundwater is or could carry contaminants into the river, but only at concentrations significantly below the SLVs listed in the JSCS. DEQ determines that the pathway is "complete," but no source control actions are needed because SLVs are not exceeded.
- Example 3: Initial investigations of a site near (but not adjacent to) the river indicate that stormwater has the potential to migrate toward the river and carry contaminants. DEQ oversees a SCE to determine whether stormwater is in fact migrating to the river and whether it is or could carry contaminants to the river. The SCE concludes that stormwater is actually not reaching the river and could not reach the river because it is diverted to a stormwater treatment system. DEQ determines that the pathway is "not complete" and no source control actions are needed.

Definition of "Insignificant pathway; no actions recommended"

⁵ See p. 3-1 through 3-6 of the JSCS for more information about SLVs.

The term "insignificant pathway; no actions recommended," is used in Table 1 when (1) the pathway is complete, and (2) contaminant concentrations are near or below SLVs at a point of compliance (e.g., river bank monitoring wells) and are not anticipated to increase.

Use of "N/A" for the pathways

"N/A" is used in Table 1 to indicate that the particular pathway does not exist at the site. For example, for an upland site that is set back from the river (i.e., not adjacent to the river's edge) N/A would indicate that the overland transport/sheet flow, overwater activities, and bank erosion pathways do not exist at the site. For a site that is adjacent to the river, but where a concrete seawall lines the river bank, N/A would indicate that the pathway bank erosion does not exist at the site.

Priority levels for each pathway and site

Each pathway evaluated at each site is given a priority level for source control upon completion of the SCE, or when adequate information exists to determine the pathway's priority. Pathways are prioritized based on their ability to carry contaminants from upland areas to the river at concentrations that exceed SLVs. Each site is then given a priority level based on the highest priority of the pathways. For example, if a site has two low priority pathways and one high priority pathway, the site is determined to be a high priority for source control. Definitions for high, medium and low priority determinations follow.

- High High priority pathways and sites are those where a complete contaminant migration pathway exists and the upland source is significantly impacting the river or poses a significant and imminent threat to the river based on initial evaluation of key source control prioritization factors (listed on p. 4-3 of the JSCS). A primary consideration is that one or more media (soil, groundwater or stormwater) significantly exceed applicable SLVs at the point of discharge to the river (e.g., water at the end of a discharge pipe or soil or material at the riverbank) or the most reliable and cost-effective data point (e.g., groundwater measured at the shoreline), or where a bioaccumulative chemical is detected at concentrations significantly above the SLV. In addition, if an upland source is violating DEQ narrative water quality criteria for the Willamette River, the site may be considered a high priority. High priority sites are expected to move forward with aggressive source control measures without delay or be subject to enforcement action.
- Medium Medium priority pathways and sites are those where a complete contaminant migration pathway exists and the upland source is impacting the river or poses a significant and/or imminent threat to the river based on an initial evaluation of key source control prioritization factors (listed on p. 4-3 of the JSCS). A primary consideration is that one or more media exceed applicable SLVs, but not significantly, at the point of discharge to the river, or where a bioaccumulative chemical is detected at concentrations above the SLV. Although exceedance of SLVs does not necessarily indicate that a site poses a significant and/or imminent threat or needs to immediately implement source control measures, it does indicate that the site may pose a threat to human health or the environment and that additional evaluation may be needed to determine if source control measures are required to prevent, minimize or mitigate the migration of hazardous substances to the river. If the site exceeds one or more SLVs, the need for further characterization or for implementation of source control measures will be based on a site-specific weight-of-evidence determination.

Medium priority sites are expected to perform a weight-of-evidence evaluation to determine if source control measures are required (see p. 4-5 of the JSCS for more information on the weight-of-evidence evaluation).

- Low Low priority pathways and sites are those where upland data indicate, based on an initial evaluation of key source control prioritization factors (listed on p. 4-3 JSCS), that the site likely poses a low threat to the river (e.g., concentrations are near or below SLVs) or where DEQ, in consultation with EPA, may issue an upland "No Further Action" (NFA) determination or lower the State's priority of the site for further upland investigation or remedial action under DEQ's cleanup authority. Source control measures will not be required at low priority sites unless determined necessary by the results of the Portland Harbor RIFS or ROD.
- p High DEQ's preliminary determination is that this is likely a high priority pathway or site based on available information. A final determination of pathway or site priority will be made upon completion of the SCE.
- p Med DEQ's preliminary determination is that this is likely a medium priority pathway or site based on available information. A final determination of pathway or site priority will be made upon completion of the SCE.
- p Low DEQ's preliminary determination is that this is likely a low priority pathway or site based on available information. A final determination of pathway or site priority will be made upon completion of the SCE.

Source Control Decisions and Status of Source Control Measures

The Source Control Decisions (SCDs) and Status of Source Control Measures (SCMs) columns in Table 1 provide information on actions taken or needed to control sources of contamination to the river, including the selected SCMs for each pathway, status of SCM implementation, status of EPA review, and ongoing operation and maintenance requirements.

For many sites listed in Table 1, boxes for information on SCDs and SCMs will be blank because source control work at those sites is still in the evaluation (SCE) phase. Other sites may be in the process of implementing SCMs, and still others may have completed all source control work. For those sites that have completed upland source control and SCMs have been determined to be effective, shading indicates that work is finished at this point in time. Upon completion of the Portland Harbor in-water RIFS, however, DEQ will reevaluate all source control work to ensure that it adequate controlled contaminants to the final cleanup levels developed for the Harbor.

9.1 Acronyms and abbreviations

Agr Agreement

AOC Administrative Order on Consent

AS/SVE Air sparge/soil vapor extraction – a Source Control Measure used to remove

volatile contaminants from groundwater; often combined with treatment measures

AST Above ground Storage Tank

AWQC Ambient Water Quality Criteria
BES Bureau of Environmental Services

BIP Burgard Industrial Park
BMPs Best Management Practices
BRA Baseline Risk Assessment

CERCLA Comprehensive Environmental Response, Compensation and Liability Act
COI Contaminant of Interest – chemicals present in Portland Harbor at levels that

could threaten human health and the environment

CSOs Combined-Sewer Overflows

cy Cubic Yard

DEQ Oregon Department of Environmental Quality

ECSI DEQ's Environmental Cleanup Site Information database

EIB Enhanced In-situ Bioremediation EPA Environmental Protection Agency

FS Feasibility Study – a phase of the cleanup process; evaluating cleanup alternatives

after the Remedial Investigation has been completed

FFS Focused Feasibility Study

GW or gw Groundwater

ICP Independent Cleanup PathwayIGA Inter-Governmental AgreementIRAM Interim Remedial Action Measure

HVOCs Halogenated Volatile Organic Compounds

IRAM Interim Remedial Action Measure

JSCS Joint Source Control Strategy – issued by DEQ and EPA in December 2005⁶

LNAPL Low density Non-Aqueous Phase Liquid

LWG Lower Willamette Group
MOA Memorandum of Agreement
MOU Memorandum of Understanding

MS4 Municipal Separate Storm Sewer System

N/A Not Applicable – used in Table 1 to indicate that the particular pathway does not

exist at the site

NAPL Non-Aqueous Phase Liquid

N&E Nature and extent of the contamination at the site

NFA No Further Action – a DEQ notice to a Responsible Party declaring that no further

cleanup action is needed at the site

NPDES National Pollutant Discharge Elimination System

NPL National Priority List

OF Outfall

p&t Pump & Treat system – a Source Control Measure used to remove or contain and

treat contaminated groundwater

PA Preliminary Assessment – an early assessment stage of the cleanup process

PCB Polychlorinated Biphenyls

PH Portland Harbor

⁶ The JSCS is available on DEQ's web site at (http://www.deq.state.or.us/lq/cu/nwr/PortlandHarbor/index.htm); click "Joint Source Control Strategy" on the left side bar.

PH Agr Portland Harbor Agreement – a formal agreement to conduct the remedial

investigation and source control work

PH Ltr Agr Portland Harbor Letter Agreement – an initial agreement to conduct limited

investigation and cleanup activities and cover DEQ's oversight costs

PM DEQ Project Manager leading cleanup work at the site

PPA Prospective Purchaser Agreement – a tool for negotiating and agreeing upon

potential liability for prospective purchasers of sites

PRP Potentially Responsible Party

ROD Record of Decision

RD/RA Remedial Design/Remedial Action – a phase of the cleanup process that occurs

after the Record of Decision; designing and implementing the cleanup action

RI Remedial Investigation – a phase of the cleanup process; investigating the nature

and extent of contamination and understanding the potential risks posed by the

contaminants to human health and the environment

RI/FS Remedial Investigation/Feasibility Study

RM River Mile

RP Responsible Party SC Source Control

SCD Source Control Decision
SCE Source Control Evaluation
SCM Source Control Measure
SIC Schnitzer Investment Corp

SLV Screening Level Value – a contaminant-specific level established in the JSCS (see

JSCS Table 3.1) that is used to screen upland pathways and sites to identify

potential threats to human health and the environment.

SOW Scope of Work

SVE Soil Vapor Extraction – a Source Control Measure used to remove volatile

contaminants from subsurface soils; often combined with soil vapor treatment

TBD To Be Determined TCA Trichloroethane

UIC Underground Injection Control system

UST Underground Storage Tank
VCP Voluntary Cleanup Program
VOCs Volatile Organic Compounds

WO Waiting on

XPA Expanded Preliminary Assessment – an early assessment stage of the cleanup

process

9.2 Contact information for DEQ Project Managers

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			rmation	941955 01	contamination to t	t status				Source Con	trol Evalu	uation (SCE)				Source	Control	Decisions	(SCDs) ar	d Status o	f Source Co	ntrol N	leasures	(SCMs)
Site name	ECSI#	River mile	Address	DEQ PM	Type of agreement directing source control	Project status	Date last modified (m-d-y)	SCE Pathway	Status of SCE	Major SCE tasks to be completed	Schedule for completing SCE	Basis for determination is need Pathway		Site	Status of EPA review of SCE	Source control alternatives evaluation and schedule (m-y)		Status of EPA	SCM activities completed to date	Mass or volume of contaminants controlled	Additonal Proposed SCM activities to be done and schedule (m-	Date SCM	Status of EPA	Operaton and maintenance
Terminal 5	1686	1.5 E	15540, 15550, & 15560 N	Tom Gainer	IGA	NFA	02/19/09	Overland Transport/Sheel Flow	N/A	NA NA	N/A	determination N/A	level	level	N/A	N/A	NA NA	NA NA	NA NA	NA NA	y)		SCM	requirements
Terminal 5	1686	1.5 E	15540, 15550, & 15560 N	Tom	IGA	NFA	02/19/09	Bank Erosion	N/A	NA NA	N/A	N/A	none				Calling S		THE REAL PROPERTY.	inedia ay	NA NA	NA	NA .	NA
Terminal 5	1686	1.5 E	Lombard 15540, 15550, & 15560 N	Gainer	IGA	NFA	02/19/09	Groundwater	Completed	NA NA	760	Insignificant pathway, no	Low		N/A SCE submitted to EPA 6/07 - EPA	NA .	NA	NA	NA .	NA .	NA .	NA	NA .	NA NA
Terminal 5	1686	1.5 E	15540, 15550, & 15560 N	Tom	IGA	NFA	02/19/09	Stormwater	Completed	NA NA	April 1	Insignificant pathway; no	Low	Low	6/07 SCE submitted to EPA 6/07 - EPA		Pas						100-1	1 mg 1 mg
ferminal 5	1686	1.5 E	15540, 15550, & 15560 N	Tom	IGA	NFA	02/19/09	Overwater Activities	N/A	N/A	N/A	actions recommended	none		6/07	N/A								
erminal 5	1686	1.5 E	Lombard 15540, 15550, & 15560 N	Gainer	IGA	NFA	02/19/09	Other	N/A	N/A	N/A	N/A	none		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
egon Steel	141	22E	Lombard 14400 N	Gainer	PH Agrifor RVSCM	RI	08/03/10	Overland	N/A	N/A	N/A	no pathway; berin	None		7/1		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Mills regon Steel Mills	141	22E	14400 N Rivergate	Jennifer Sutter	(8/00) PH Agrifor RVSCM (8/00)	Ri	08/03/10	Transport/Sheet Flow Bank Erosion	Completed	GA.	SCE is part of June 05 Alternatives Evaluation	prevents overland transport/sheet flow Pathway is complete	High		Deferred to Alternatives Evaluation	N/A Original permit for shoreline action withdrawn based on Agency input. New permit with modified design to be submitted once additional shoreline sampling results evaluated.	N/A	Evaluating path forward considering EPA/Natural Resource Trustee comments	N/A	N/A	N/A	N/A	N/A	N/A
egon Steel Mills	141	22E	14400 N Rivergate	Jennifer Sutter	PH Agr for RESCM (6/00)	RI	08/03/10	Groundwater (UST & AST AOCs)	Completed			insignificant pathway, no actions recommended	Low		SCE submitted to EPA 10/2004; no comments received		Soil removal completed at time of spill, prior to SCE						SCE submitted to EPA 10/2004: no comments received	Operation an Maintenance requirement
egon Steel Mills	141	2.2 E	14400 N Rivergate	Jennifer Sutter	PH Agr for RVSCM (6/00)	RI	08/03/10	Groundwater (other AOCs)	Ongoing	DEQ SCE memo for EPA in preperation	1st qtr 2011	Pathway is complete	Medium	High	Pending completion of SCE									
egon Steel Mills	141	2.2 E	14400 N Rivergate	Jennifer Sutter	PH Agrior RI/SCM (6/00)	RE	08/03/10	Stormwater	Completed			Pathway is complete	High		SCE is part of Alternatives Evaluation	alternative evaluation completed 2005	End of pipe treatment	EPA agreed with proposed approach 9/14/06	Full-scate pilot operating 10/07; end of pipe treatment expanded to central outfall Fall 2008; loading evaluation approved 2010 however, evaluating appropriate treatment chemical		pilot testing completed, loading evaluation approved 2010, evaluating treatment chemical			
egon Steel Mils	141	2.2 E	14400 N Rivergate	Jennifer Sutter	PH Agrifor RVSCM (6/00)	Ri	08/03/10	Overwater Activities	N/A	N/A	N/A	No known current sources (spills reported to OERS)	none		N/A	NA	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
gon Steel Mills	141	2.2 E	14400 N Rivergale	Jennifer Sutter	PH Agrifor RVSCM (6/00)	RI	08/03/10	Other -, current NPDES permitted discharge	Completed	N/A	Addressed under NPDES permit	Pathway addressed via NPDES permit	none		N/A	N/A	N/A	N/A	N/A	N/A	N/A	NIA	N/A	N/A
co Landfill uive Island	4409	2.6	14444 NW Gillihan Loop	No PM Assigned	Industrial landfill disposal permit	Solid Waste Landfill Permit	08/20/08	Overland Transport/Sheet Flow	N/A	N/A	N/A	N/A	none			N/A	N/A	NA	N/A	N/A	N/A	N/A	N/A	N/A
co Landfill live Island	4409	2.6	14444 NW Gillihan Loop	No PM Assigned	Industrial landfill disposal permit	Solid Waste Landfill Permit	08/20/08	Bank Erosion	NA	NA	N/A	NA	none			N/A	N/A	N/A	N/A	N/A	NA	N/A	N/A	N/A
co Landfill uive Island	4409	2.6	14444 NW Gillihan Loop	No PM Assigned	Industrial landfill disposal permit	Solid Waste Landfill Permit	08/20/08	Groundwater	N/A	N/A	N/A	NA	none			N/A	N/A	NA	N/A	N/A	NA	N/A	N/A	N/A
co Landfill uive Island	4409	2.6	14444 NW Gillitan Loop	No PM Assigned	Industrial landfill disposal permit	Solid Waste Landfill Permit	08/20/08	Stormwater	N/A	N/A	N/A	NA	none	Low		NA	N/A	NA	NA	N/A	N/A	N/A	N/A	N/A
o Landfill ive Island	4409	2.6	14444 NW Gillihan Loop	No PM Assigned	Industrial landfill disposal permit	Solid Waste Landfill Permit	08/20/08	Overwater Activities	N/A	NA	N/A	NA	none			N/A	N/A	NA	N/A	N/A	N/A	NA	N/A	N/A
o Landfill ive Island	4409	2.5	14444 NW Gillihan Loop	No PM Assigned	Industrial landfill disposal permit	Solid Waste Landfill Permit	08/20/08	Other	N/A	N/A	N/A	NA	none			NA	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
solidated Metco	3295	2.8 E	3940 N Rivergate	Mike Romero	PH Letter Agr for XPA		06/30/10	Overland Transport/Sheet Flow	N/A	N/A	N/A	N/A	none		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
solidated Metco	3295	28E	3940 N Rivergate	Mike Romero	PH Letter Agr for XPA	XPA	06/30/10	Bank Erosion	N/A	N/A	N/A	N/A	none		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

				ources of	contamination to the					Source Con	trol Evalu	ation (SCE)				Source	Control	Decisions	(SCDs) an	d Status of	Source Cor	trol M	easures	(SCMs)
	Site	e inforr	mation		Projec	t status					1	Basis for determination		control	0	Source control		Status of EPA	SCM activities	Mass or volume of	Additional Proposed	Date SCM	Status of EPA	Operaton and
Site name	ECSI #	River mile	Address	DEQ PM	Type of agreement directing source control	Project status	Date last modified (m-d-y)	SCE Pathway	Status of SCE	Major SCE tasks to be completed	Schedule for completing SCE	Pathway determination	Pathway	Site priority level	Status of EPA review of SCE decision	alternatives evaluation and schedule (m-y)	Selected SCMs	review of SCM selection decision	completed to date (m-y)	enstaminante	SCM activities to be done and schedule (m- y)	completed (m-y)	review of completed SCM	maintenance requirements
Consolidated Metco	3295	2.8 E	3940 N Rivergate	Mike Romero	PH Letter Agr for XPA	XPA	06/30/10	Groundwater	Completed	None	N/A	Incomplete pathway	none		Anticipate providing SCE to EPA 2nd Qtr 2011									
Consolidated Metco	3295	28E	3940 N Rivergate	Mike Romero	PH Letter Agr for XPA	ХРА	06/30/10	Stormwater	Completed			Complete	Medium	Medium	Anticipate providing SCE to EPA 2nd Otr 2011		Cleaned stormsewer lines, proposed line repair options and post SCM monitoring plan.		Stormwater system repair completed 2nd quarter 2010		Performance monitoring ungoing - anticipate providing EPA summary of remedy effectiveness 2nd Qtr 2011			
Consolidated Metco	3295	2.8 E	3940 N Rivergate	Mike Romero	PH Letter Agr for XPA	XPA	06/30/10	Overwater Activities	N/A	NA	N/A	NA	none		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Consolidated Metco	3295	2.8 E	3940 N Rivergate	Mike Romero	PH Letter Agr for XPA	XPA	06/30/10	Other	N/A	N/A	N/A	N/A	none		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
PGE Harborlo	n 2353	3.2 W	NW Marina Way	Matt McClincy	PH Agr for RVSCM (6/00)	Completed SCD	03/06/06	Overland Transport/Sheet Flow	N/A	N/A	N/A	N/A	none		N/A	N/A	N/A	N/A	N/A	N/A	NA	N/A	N/A	N/A.
PGE Harborto	n 2353	3.2 W	NW Marina Way	Matt McClincy	PH Agr for RI/SCM (6/00)	Completed SCD	03/06/06	Bank Erosion	Completed			Insignificant pathway, no actions recommended	Low		EPA reviewed and commented 5/04		No SCM needed					HOAL.		
PGE Harborto	n 2353	32W	NW Marina Way	Matt McClincy	PH Agr for RVSCM (6/00)	Completed	03/06/06	Groundwater	Completed		0.72.74	Insignificant pathway, no actions recommended	Low	- 22	EPA reviewed and commented 5/04		No SCM needed							
PGE Harborto	n 2353	32W	NW Marina Way	Matt McClincy	PH Agr for RI/SCM (6/00)	Completed	03/05/06	Stormwater	Completed			Insignificant pathway, no actions recommended	Low	Low	EPA reviewed and commented 5/04		No SCM needed							
PGE Harborto	n 2353	3.2W	NW Marina Way	Matt McClincy	PH Agr for RVSCM (6/00)	Completed		Overwater Activities	N/A	N/A	N/A	NA	none		N/A	N/A	NA	N/A	N/A	N/A	N/A	N/A	N/A	NA
PGE Harborto	n 2353	3.2 W	NW Marina Way	Matt McClincy	PH Agr for RI/SCM (6/00)	Completed		Other	N/A	N/A	N/A	N/A	hane		N/A	N/A	NA	N/A	N/A	N/A	N/A	N/A	N/A	NIA
Time Oil	170	3.4 E	10350 Time O	Ken Thiessen	Pre-PH Agr. (9/96)	BRA	07/06/10	Overland Transport/Sheet Flow	Completed	None	First Quarter 2011	Incomplete pathway	none		SCE will be submitted to EPA when stormwater assessment is complete									
Time Oil	170	3.4 E	10350 Time O	Ken Thiessen	Pre-PH Agr. (9/96)	BRA	07/06/10	Bank Erosion	Completed	None	First Quarter 2011	Insignificant pathway; no actions recommended	pLow		SCE will be submitted to EPA when stormwater assessment is complete									
Time Oil	170	3.4 E	10350 Time O Rd	Ken Thiessen	Pre-PH Agr. (9/96)	BRA	07/06/10	Groundwater (Main Tank Farm Petroleum Plume)	Completed	None	First Quarter 2011	Pathway is complete. GW Monitoring ongoing	Medium		SCE will be submitted to EPA when stormwater assessment is complete	Work plan for soil removal in tank farm area in review	Impacted source area soil to be removed							
Time Oil	170	3.4 E	10350 Time O Rd	Ken Thiessen	Pre-PH Agr. (9/96)	BRA	07/06/10	Groundwater (Bell Terminal Petroleum Phirme)	Completed	None	First Quarter 2011	Pathway is incomplete. GW Monitoring ongoing	pLow	Medium	SCE will be submitted to EPA when stormwater assessment is complete									
Time Oil	170	3.4E	10350 Time O Rd	i Ken Thiessen	Pre-PH Agr. (9/98)	BRA	07/06/10	Groundwater (Penta Plume)	Completed			SCMs retard penta migration and prevent penta discharge to private stormwater outfall	Meclum		SCE submitted to EPA.	alternatives evaluation completed 2004	Source area pump & treat; insitu chemical oxidation (ISCO) gw to sw intercept pump & treat, plans for additional source area soil remove in development	to EPA May 2004; partners responded with questions	rounds of ISCO	and treated, ISCO has treated	TBD - bioremediation methods being tested			Ongoing maintenance and monitoring of pump treat system
Time Oil	170	3.4 E	10350 Time C	Ken Thiessen	Pre-PH Agr. (9/96)	BRA	07/06/10	Stormwater	Ongoing	Complete stormwater characterization	4th Quarter 2010	Pathway is complete	plow		Waiting on SCE phase to be completed									
Time Oil	170	3.4 E	10350 Time C	Ken Thiessen	Pre-PH Agr. (9/96)	BRA	07/06/10	Overwater Activities	N/A	NA	N/A	No known current sources (no spills reported to OERS)	none		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Time Oil	170	0 3.4E	10250 Time C	The second second	Pre-PH Agr. (9/96)	BRA	07/06/10	Other	N/A	N/A	N/A	N/A	none		NA	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
City of Portland	WEST ST	00 3.5 lo 9.2	Various	Karen Tamow	IGA for RI SCM (8/0)	3) RI	08/05/10	Overtand Transport/Sheet Flow	N/A	N/A	N/A	N/A	none		NA	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Outfalls City of Portland	varie.	00 3.5 to	various	Karen Tamow	IGA for RI SCM (8/0	3) RI	08/05/10	Bank Erosion	N/A	N/A	N/A:	N/A	thrude		N/A	N/A	N/A	N/A	N/A	N/A	NA	N/A	N/A	N/A
Outfalls City of Portland Outfalls		00 3.5 (c)	Services	Karen Tarnow	IGA for RI SCM (8/0	3) RI	08/05/10	Groundwater	N/A	N/A	NIA	N/A	none		NIA	N/A	N/A	N/A	NA	N/A	N/A	N/A	N/A:	N/A

			suspected s	sources of	contamination to the	he river t status				Source Con	trol Evalu	uation (SCE)				Source	Control	Decisions	(SCDe) ar	nd Statue o	f Source Co	strol N	logouros	(CCMa)
AXA		Dhari			Type of agreement		Date last					Basis for determination is ne		e control	Status of EPA	Source control	Jonatol	Status of EPA			Additional Proposed		Status of EPA	
Site name	ECSI#	mile	Address	DEQ PM	directing source control	Project status	modified (m-d-y)	SCE Pathway	Status of SCE	Major SCE tasks to be completed	Schedule for completing SCE	Pathway determination	Pathway priority level	Site priority level	review of SCE	alternatives evaluation and schedule (m-y)	Selected SCMs	review of SCM selection decision	SCM activities completed to date (m-y)	Mass or volume of contaminants controlled	SCM activities to be done and schedule (m- y)	Date SCM completed (m-y)	review of completed SCM	Operaton and maintenance requirements
City of Portland Outfalls	veriou s	3.5 to. 9.2	various	Karen Tarnow	IGA for RI SCM (8/03)	RI	08/05/10	Stormwater	Ongoing	Complete outfall basin characterizations, site-specific investigations and source control.	Ongoing (corresponding to Portland Harbor ROD)	Pathway is complete; priority varies from basin to basin		to be	Waiting on SCE to be completed.		Final SCM TBD. Ongoing SW Inspections, investigations of Bioti discharges, identification of potential contributors to City system. Site- specific catich basin cleanouts, line cleaning, and implementation of BMPs							
City of Portland Outfalls	veriou \$	3,5 to 0,2	Vectoria :	Karen Tarnow	IGA for RI SCM (8/03)	RI	08/05/10	Overwater Activities	N/A	N/A	N/A	N/A	none		NA	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Oity of Portland Outfalls	seriou s	3.5 in 9.2	various	Karen Tamow	IGA for RI SCM (8/03)	RI	08/05/10	Other	N/A	N/A	N/A	N/A	none		NA	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Georgia Pacific Linnton	2370	3.5 W	12222 NW Marina	Tom Gainer	PH Letter Agr for XPA (10/99)	XPA	06/12/06	Overland Transport/Sheet Flow	Completed			Insignificent pathway, no actions recommended	Low		EPA reviewed in 2000 and did not provide comments		No SCM needed		Tar Say					
Georgia Pacific Linnton	2370	3.5 W	12222 NW Marina	Tom Gainer	PH Letter Agr for XPA (10/99)	XPA	06/12/06	Bank Erosion	N/A	N/A	N/A	N/A	none	La co	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Georgia Pacific Linnton		3.5 W	12222 NW Marina	Tom Gainer	PH Letter Agr for XPA (10/99)		06/12/08	Groundwater	Completed	10/2001 DEQ concluded not a current source. \$2002 DEQ requesteded additional groundwater work based on new PH strategies. \$2002. \$2P declined. DEQ considers groundwater pathway not fully characterized, but not a high priority.			Low	Low	EPA reviewed in 2000 and did not provide comments.	NA NA	No SCM needed	NA	NA .	NA	NA	NA NA	NA	N/A
Georgia Pacific Linnton	2370	3.5 W	12222 NW Marina	Tom Gainer	PH Letter Agr for XPA (10/99)	XPA	06/12/06	Stormwater	N/A	N/A	N/A	N/A	none		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	NA	N/A
Georgia Pacific Linnton	2370	3.5 W	12222 NW Marina	Tom Gainer	PH Letter Agr for XPA (10/99)	XPA	06/12/06	Overwater Activities	N/A	N/A	N/A	No known current sources (spills reported to OERS)	none		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Georgia Pacific Linnton	2370	3.5 W	12222 NW Marina	Tom Gainer	PH Letter Agr for XPA (10/99)	XPA	06/12/06	Other	NA	N/A	N/A	N/A	none	21	NIA	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
ACF Industries	794	3.6 W	12160 NW St Helens	Dan Haffey	Unilateral Order (8/00)	NFA	11/28/06	Overland Transport/Sheet Flow	N/A	N/A	N/A	N/A	none		N/A	N/A	N/A	N/A	N/A	N/A	NA	N/A	N/A	N/A
ACF Industries	794	3.5 W	12160 NW St Helens	Dan Haffey	Unilateral Order (8/00)	NFA	11/28/06	Bank Erosion	N/A	N/A	N/A	N/A	none		N/A	N/A	N/A	N/A	NA	N/A	N/A	N/A	N/A	N/A
ACF Industries	794	3.6 W	12160 NW St Helens	Dan Hafley	Unilateral Order (8/00)	NFA	11/28/08	Groundwater	Completed			Insignificant pathway; no actions recommended	Low		SCE submitted to EPA (10/04); no comments		No SCM needed						SCM submitted to EPA (10/04).	
ACF Industries	794	3.6 W	12160 NW St Helens	Dan Haffey	Unilateral Order (6/00)	NFA	11/28/06	Stormwater	Completed			Currently insignificant pathway, stormwater pipe suspected past migration pathway	Low	Low	SCE submitted to EPA (10/04); no comments		Completed FS proposes removal of contaminated off-site soil potentially available for transport to river.	SCM submitted to EPA (10/04). No comments	6,400 tons of contaminated soil removed in 2006 and site capped with 1.5 feet of clean fill in 2007				No comments. SCM submitted to EPA (10/04). No comments.	
ACF Industries	794	3.6 W	12160 NW St Helens	Dan Hafley	Unitateral Order (8/00)	NFA	11/28/06	Overwater Activities	N/A	NA	N/A	N/A	none		N/A	N/A	N/A	N/A	NA	N/A	N/A	N/A	N/A	NA
ACF Industries	794	3.6 W	12160 NW St Helens	Dan Hafley	Unilateral Order (8/00)	NFA	11/28/06	Other	N/A	N/A	N/A	N/A	none		N/A	N/A	N/A	N/A	N/A	N/A	N/A	NA	N/A	N/A
innton Oil Fire Training Grounds	1189	3.6 W	NW Marina Way	Torn Gainer	IGA	NFA	03/02/06	Overland Transport/Sheet Flow	Completed			Insignificant pathway, no actions recommended	Low		Complete			mela w					And the same of	
innton Oil Fire Training Grounds	1189	3.6 W	NW Marina Way	Tom Gainer	IGA	NFA	03/02/06	Bank Erosion	Completed			Insignificant pathway, no actions recommended	Low		Complete									
Innton Oil Fire Training Grounds	1189	3.8 W	NW Marina Way	Tom Gainer	IGA	NFA	03/02/06	Groundwater	Completed	more see		Currently no complete pathway, groundwater monitoring to confirm plume stability	Low		Complete		ran (S. cal			-				Annual groundwater monitoring (conditional NFA)

		med or s		ources of	contamination to the	ne river t status			-	Source Con	trol Evalu	uation (SCE)				Source	Control	Decisions	(SCDs) an	d Status o	f Source Co	ntrol M	easures	(SCMs)
Site name		Piver	Address	DEQ PM	Type of agreement directing source control	Project status	Date last modified (m-d-y)	SCE Pathway	Status of SCE	Major SCE tasks to be completed	Schedule for completing SCE	Basis for determination is nee Pathway determination		Charles Action	Status of EPA review of SCE decision	Source control alternatives evaluation and schedule (m-y)	Selected SCMs	Status of EPA review of SCM selection decision	SCM activities completed to date (m-y)	Mass or volume of contaminants controlled	Additional Proposed SCM activities to be done and schedule (m- y)	Date SCM completed (m-y)	Status of EPA review of completed SCM	Operaton and maintenance requirements
Innton Of Fin Training Grounds	e 1189	3.6 W	NW Marina Way	Tom Gainer	IGA	NFA	03/02/06	Stormwater	Completed			Insignificant pathway, no actions recommended	Low		Complete							li di		
innton Oil Fire Training Grounds	1189	3.8 W	NW Marina Way	Tom Gainer	IGA	N/A	03/02/06	Overwater Activities	N/A	N/A	N/A	N/A	none		NA	N/A	NIA	N/A	N/A	N/A	N/A	N/A	NA	NA
Innton Ol Fin Training Grounds	1189	3.6 W	NW Marina Way	Torn Gainer	IGA	N/A	03/02/06	Other	N/A	N/A	N/A	N/A	none		N/A	N/A	N/A	NA	N/A	N/A	N/A	N/A	N/A	N/A
Premier Edible Oils	e 2013	3.6 E	10400 N Burgard	Ken Thlessen	PH Agr for RVSCM (7/01)	Ri	07/06/10	Overland Transport/Sheet Flow	Ongoing	To be evaluated as part of stormwater evaluation	Estimated Fourth Quarter 2011	Pending	pLow	High										
Premier Edibli Oils	e 2013	3.6 E	16400 N Burgard	Ken Thiessen	PH Agr for RVSCM (7/01)	RI	07/06/10	Bank Erosion	Ongoing	Additional sampling needed	Estimated Fourth Quarter 2011	Pending	pLow											
Premier Edible Olis	e 2013	3.6 E	10400 N Burgard	Ken Thiessen	PH Agr for RVSCM (7/01)	RISCE	07/06/10	Stormwater	Ongoing	Complete stormwater system characterization	Estimated Fourth Quarter 2011	Pending	pLow			N/A	N/A	NA	N/A	N/A	NA	N/A	N/A	N/A
Premier Edibl Oils	e 2013	3.6 E	10400 N Burgard	Ken Thiessen	PH Agr for RVSCM (7/01)	RISCE	07/06/10	Overwater Activities	Ongoing	N/A	NA	NA.	none		N/A	N/A	NA	N/A	N/A	N/A	N/A	N/A	NIA	N/A
Premier Edibl Olfs	e 2013	3.8 €	10400 N Burgard	Ken Thiessen	PH Agr for RVSCM (7/Q1)	RVSCE	07/06/10	Groundwater and LNAPL to surface water at size shoreline	Completed	None	N/A adequate documentation exists	Complete	High			SCM Evaluation (FFS) in preparation	1							
RoMar Realty of Oregon	y 2437	3.6 E	9333 N Time Oil	Tom Gainer	PH Lir Agr for XPA	NFA	06/12/08	Overland Transport/Sheet Flow	Completed			Insignificant pathway, no actions recommended	Low		SCE submitted to EPA (3/06), DEQ responds 4/06	Fraisi					Prison		No. of the	
RoMar Realt of Oregon	y 2437	3.6 E	9333 N Time Oil	Tom Gainer	PH Ltr Agr for XPA	NFA	08/12/06	Bank Erosion	Completed			Insignificant pathway, no actions recommended	Low		N/A					a visit				
RoMar Realt of Oregon	y 2437	3.6 E	9333 N Time Oil	Torn Gainer	PH Lir Agr for XPA	NFA	06/12/06	Groundwater	Completed			Insignificant pathway, no actions recommended	Low	Low	SCE submitted to EPA (3/06); DEQ responds 4/06					TOU ST				
RoMar Realt of Oregon	y 2437	3.6 E	9333 N Time Oil	Tom Gainer	PH Ltr Agr for XPA	NFA	06/12/06	Stormwater	Completed			Insignificant pathway, no actions recommended	Low		SCE submitted to EPA (3/06); DEQ responds 4/06									
RoMar Realt of Oregon	y 2437	3.6 E	9333 N Time Oil	Tom Gainer	PH Lir Agr for XPA	NFA	06/12/06	Overwater Activities	N/A	NA	N/A	N/A	none		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	NA	N/A
RoMar Realt of Oregon	y 2437	7 3.6 E	9333 N Time Oil	Tom Gainer	PH Ltr Agr for XPA	NFA	06/12/06	Other	NIA	N/A	N/A	N/A	none		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Jefferson Smurfit	2371	3.7 E	9930 N Burgard	Matt. McClincy	PH Letter Agr for XPA (12/00)	XPA	03/06/06	Overland Transport/Sheet Flow	N/A	N/A	N/A	N/A	none	1 16	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Jefferson Smurfit	2371	3.7 E	9930 N Burgard	Matt. McClincy	PH Letter Agr for XPA (12/00)	XPA	03/06/06	Bank Erosion	N/A	N/A	N/A	N/A	none		N/A EPA Reviewed and	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	NIA
Jefferson Smurfit	2371	1 3.7 E	9930 N Burgard	Matt McClincy	PH Letter Agr for XPA (12/00)	XPA	03/06/06	Groundwater	Completed			Insignificant pathway, no actions recommended	Low		commented 10/20/02		No SCM needed			N. C. Contract				
Jefferson Smurfit	2371	1 3.7E	9930 N Burgard	. Matt McClincy	PH Letter Agr for XP/ (12/00)	XPA	03/06/06	Stormwater	Completed			Insignificant pathway, no actions recommended	Low	Low	EPA Reviewed and commented 10/20/02		No SCM needer	d				1		
Jefferson Smurfit	2371	1 3.7 E	9930 N	Matt McClincy	PH Letter Agr for XPA	XPA	03/06/06	Overwater Activities	N/A	N/A	N/A	N/A	none	1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Jefferson Smurfit	1000	1 3.7 E	9930 N Burgard	Matt. McClincy	PH Letter Agr for XPA	XPA	03/06/06	Other	N/A	N/A	N/A	N/A	none	1	N/A	NA	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Owens- Coming Fibergless (Trumbull As	100	6 3.8 W	WARA NIMES		PH Letter Agr for XPA (12/99)	хра	07/01/10	Overland Transport/Sheet Flow	Ongoing	Review draft SCE	4th Qtr 2010	Insignificant pathway, no actions recommended	ptow		Pending completion of SCE	n en	TO VA		Is made			What		
Owens- Corning Fiberglass (Trumbull As	1036	5 3.8 W	11444 NW St Helens	Shawn Rapp	PH Letter Agr for XP/ (12/99)	XPA	07/01/10	Bank Erosion	Ongoing	Review draft SCE	4th Otr 2010	Insignificant pathway, no actions recommended	plim		Pending completion of SCE	in .					A TEST			No.
Owens- Coming Fiberglass (Trumbull As	1036	6 38W	11444 NW St Helens	Shawn Rapp	PH Letter Agr for XPA (12/99)	XPA	07/01/10	Groundwater	Ongoing	Review draft SCE	4th Otr 2010	insignificant pathway, no actions recommended	pLnw	PLow	Pending completion of SCE	in .							G Park	
Owens- Corning Fiberglass (Trumbull As	103	8 3:8 W	11444 NW SI Helens	Shawn Rapp	PH Letter Agr for XP/ (12/99)	A XPA	07/01/10	Stormwater	Ongoing	Review draft SCE	4th Ot/ 2010	Waiting on SCE to be completed	p Low		Pending completic o f SCE	on .		Service of the last of the las	A COLOR				and the same	Ohn See
Owens Coming Fiberglass (Trumbull As	103	6 3.8 W	11444 NW St Helens	Shawn Rapp	PH Letter Agr for XP/ (12/99)	XPA.	07/01/10	Overwater Activities	N/A	N/A	N/A	N/A	none		N/A	NVA	N/A	N/A	N/A	N/A	N/A	N/A	N/A:	N/A

		V-10-10-V	suspected se	ources of	contamination to t	he river t status				Source Con	trol Evalu	ration (SCE)				Source	Control	Decisions	(SCDe) ar	nd Status o	f Source Cor	ntrol M	oacuroc.	(SCMo)
		River			Type of agreement	Project	Date last		Status of	Major SCE tasks to be	Schedule for	Basis for determination is ne	on that source	e control	Status of EPA	Source control		Status of EPA	SCM activities	Mass or volume of	Additional Proposed	Date SCM	Status of EPA	
Site name	ECSI#	mile	Address	DEQ PM	directing source control	status	modified (m-d-y)	SCE Pathway	SCE	completed	completing SCE	Pathway determination	Pathway priority level	Site priority level	review of SCE decision	alternatives evaluation and schedule (m-y)	Selected SCMs	review of SCM selection decision	completed to date (m-y)	contaminants controlled	SCM activities to be done and schedule (m- y)	annual stad	review of completed SCM	Operaton and maintenance requirements
Owens- Coming Fiberglass (Trumbull Asp)	1036	3.8 W	11444 NW St Helens	Shawn Rapp	PH Letter Agr for XPA (12/99)	ХРА	07/01/10	Other	N/A	N/A	N/A	N/A	none		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Schnitzer Burgard Industrial Park	5324	3.8 E	12005 N Burgard	Jim Orr	PH Agr for RI/SCM (3/00)	RI	07/29/10	Overland Transport/Sheet Flow	Ongoing	Investigation scope of work under review	тво	Waiting on SCE to be completed	p High		Waiting on SCE completion									
Schnitzer Burgard Industrial Park	5324	38E	12005 N Burgard	Jim Ort	PH Agr for RVSCM (3/00)	RI	07/29/10	Bank Erosion	Ongoing	Additional sampling needed	TBO	Waiting on SCE to be completed	p Med		Waiting on SCE completion									
Schnitzer Burgard Industrial Park	5324	3.8 E	12005 N Burgard	Jim Ocr	PH Agr for RVSCM (3/00)	RI	07/29/10	Groundwater	Ongoing	Additional groundwater characterization	тво	Waiting on SCE to be completed	p Med	pHigh	Waiting on SCE completion									
Schnitzer Burgard Industrial Park	5324	3.8 E	12005 N Burgard	Jim Orr	PH Agr for RVSCM (3/00)	Ri	07/29/10	Stormwater	Ongoing	Additional stormwater characterization	TBD	Waiting on SCE to be completed	p High		Waiting on SCE completion									
Schnitzer Burgard Industrial Park	5324	38E	12005 N Burgard	Jim Orr	PH Agr for RVSCM (3/00)	RI	07/29/10	Overwater Activities	N/A	N/A	N/A	N/A	NA		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Schnitzer Burgard Industrial Park	5324	3.8E	12005 N Burgard	Jim Orr	PH Agr for RI/SCM (3/00)	RI	07/29/10	Other	N/A	N/A	NA	N/A	N/A		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
NW Pipe	138	3.9 E	12005 N Burgard	Jim Orr	PH Agr for RVSCM (2/05)	RI	07/29/10	Overland Transport/Sheet Flow	N/A	N/A	N/A	N/A	N/A		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
NW Pipe	138	3.9 E	12005 N Burgard	Jim Orr	PH Agr for RVSCM (2/05)	RI	07/29/10	Bank Erosion	N/A	N/A	N/A	N/A	none		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
NW Pipe	138	3.9 E	12005 N Burgard	Jim Orr	PH Agr for RVSCM (2/05)	RI	07/29/10	Groundwater	Ongoing	SCE report in revision	4th Quarter 2011	Not believed to be a complete pathway	none		Waiting on SCE to be completed									
NW Pipe	138	3.9 E	12005 N Burgard	Jim Orr	PH Agr for RVSCM (2/05)	RI	07/29/10	Stormwater	Ongoing	SCE report in revision	4th Quarter 2011	SW suspected migration pathway	p Med	p Med	Waiting on SCE to be completed									
NW Pipe	138	3.9 E	12005 N Burgard	Jim Orr	PH Agr for RVSCM (2/05)	Ri	07/29/10	Overwater Activities	N/A	N/A	N/A	N/A	none		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
NW Pipe	138	3.9 E	12005 N Burgard	Jim Orr	PH Agr for RVSCM (2/05)	Ri	07/29/10	Other	N/A	N/A	N/A	N/A	none		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Schnitzer Steel	2355	4.0 E	12005 N Burgard	Jim On	PH Agr for RVSCM (3/00)	Ri	07/29/10	Overland Transport/Sheet Flow	Ongoing	Additional sampling needed	4th Quarter 2011	Walling on SCE to be completed	pHgh		Waiting on SCE to be completed				Asphalt berm constructed in summer 2009 along 925 feet of landward edge of Schnitzer dock to help prevent overland runoff to slip					
Schnitzer Steel	2355	40E	12005 N Burgard	Jim Orr	PH Agr for RI/SCM (3/00)	Rt	07/29/10	Bank Erosion	Ongoing	Additional sampling needed	4th Quarter 2011	Waiting on SCE to be completed	p Med		Waiting on SCE to be completed									Contract of
Schnitzer Steel	2355	40E	12005 N Burgard	Jim Orr	PH Agr for RISCM (3/00)	Ri	07/29/10	Groundwater	Ongoing	ongoing monitoring	4th Quarter 2011	Waiting on SCE to be completed	p Med	p High	Waiting on SCE to be completed									
Schnitzer Sleel	2355	4.0 E	12005 N Burgard	Jim Orr	PH Agr for RI/SCM (3/00)	RI	07/29/10	Stormwater	Ongoing	Ongoing monitoring - and engineering improvements including stormwater filtration and storage	4th Quarter 2011	Complete	p High		Waiting on SCE to be completed		Signicant stormwater system uplgrades in progress							
Schnitzer Sleel	2355	40E	12005 N Burgard	Jim Orr	PH Agr for RVSCM (3/00)	RI	07/29/10	Overwater Activities	Not Started	To be determined	4th Quarter 2011	Waiting on SCE to be completed	p Med		Waiting on SCE to be completed									
Schnitzer Steel	2355	4.0 E	12005 N Burgard	Jim Orr	PH Agr for RVSCM (3/00)	RI	07/29/10	Air Deposition	Not Started	To be determined	4th Quarter 2011	Waiting on SCE to be completed	p Med		Waiting on SCE to be completed									PACE A
Kinder Morgan (Aka GATX)	1096	42W	11400 NW St Helens	Mke Romero	PH Agr for RI/CSM (3/00)	RI	06/30/10	Overland Transport/Sheet Flow	N/A	N/A	N/A	N/A	none		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Kinder Morgan (Aka GATX)	1096	42W	11400 NW St Helens	Mike Romero	PH Agr for RI/SCM (6/00)	RI	06/30/10	Bank Erosion	Ongoing	To be determined	1st qtr 2011	Physical evalution of bank, sampling if possible 4th quarter 2010	to be determined		Waiting on SCE to be complete				The same			111		

,				ources of c	ontamination to th					Source Cont	rol Evalu	ation (SCE)				Source	Control	Decisions	(SCDs) an	d Status of	Source Cor	ntrol M	easures	(SCMs)
	Site	Inform	nation		Project Type of agreement		Date last					Basis for determination is nee		control	Status of EPA	Source control		Status of EPA	SCM activities	Mass or volume of	Additional Proposed SCM activities to be	Date SCM	Status of EPA review of	Operaton and
Site name	ECSI#	River	Address	DEQ PM	directing source control	Project status	modified (m-d-y)	SCE Pathway	Status of SCE	Major SCE tasks to be completed	Schedule for completing SCE	Pathway determination	Pathway priority level	Site priority level	review of SCE decision	alternatives evaluation and schedule (m-y)	Selected SCMs	review of SCM selection decision	completed to date (m-y)	contaminants controlled	done and schedule (m- y)	(m-y)	completed SCM	maintenance requirements
Gnder Morgan (Aka GATX)	1096	42 W	11400 NW St. Helens	Mike Rometo	PH Agrifor RVSCM (6/00)	RI	06/30/10	Groundwater	Ongoing	RP will conduct IRAM effectiveness evaluation and FFS for barrier wall installation	1st qtr 2011	LNAPL seeps on shoreline and dissolved petroleum likely discharging to river	pHigh	p High	Waiting on SCE to be complete		Interim LNAPL removal and groundwater pump and treat system in operation, FFS for barrier wall is in development phase							
Onder Morgan (Aka GATX)	1096	42W	11400 NW St Helens	Mike Romero	PH Agr for RVSCM (6/00)	Ri	06/20/10	Stormwaler	Ongoing	Stormwater SCE received, DEQ review and approval need.	3rd Qtr 2010	to be determined	to be determined		Waiting on SCE to be complete									
Onder Morgan (Aka GATX)	1096	4.2 W	11400 NW St Helens	Mike Romero	PH Agr for RISCM (6/90)	RI	06/30/10	Overwater Activities	N/A	NA	N/A	N/A	none		N/A	N/A:	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Onder Morgan (Aka GATX)	1096	4.2.W	11400 NW St Helens	Mike Romero	PH Agr for RVSCM (6/00)	Ri	06/30/10	NPDES Permit for groundwater treatment discharge	Ongoing	GVV treatment system & oil/water separator on NPDES - Evaluate existing data set	3rd qtr 2010	Waiting on SCE to be completed	p Low		Waiting on SCE to be complete									
Terminal 4 Slip	2356	4.3 E	11040 N Lombard	Tom Gainer	PH Agr for RVSCE	RI	08/02/10	Overland Transport/Sheet Flow	N/A	N/A	N/A	N/A	none		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	NA
Ferminal 4 Sig	2356	4.3 E	11040 N Lombard	Tom Gainer	PH Agr for RVSCE	RI	08/02/10	Bank Erosion	Completed	SCM necessary, coordinate with T4 Early Action	Tied to T4 Early Action schedule	Pathway is complete	Low		Tied to T4 Early Action schedule	Part of T-4 Early Action Process	Сар	Selected SCMs	Wheeler Bay SCMs 10-08	Completion report submitted 9-09	Wheeler Bay bank regraded and capped fall 2008	10-08	EPA reviewed and commented.	periodic inspection and maintenance
Terminal 4 Slip	2356	4.3 E	11040 N Lombard	Torn Gainer	PH Agr for RI/SCE	RI	08/02/10	Groundwater	Completed	None	N/A	Prefirminary determination that pathway is insignificant	p.Low	p Med	Waiting on results of stormwater remedy effectiveness monitoring									
Terminal 4 Sil	P 2356	4.3 E	11040 N Lombard	Tom Gainer	PH Agr for RVSCE	RI	08/02/10	Stormwater	Completed	None	N/A	Complete	p Med	pina	Waiting on results of stormwater remedy effectiveness monitoring				Stormwater BMPs and line cleanout implented - effectivess					
Terminal 4 Sig	p 2356	4.3 E	11040 N Lombard	Tom Gainer	PH Agr for RVSCE	Ri	08/02/10	Overwater Activities	N/A	N/A	N/A	No known current sources (spills reported to OERS)	none		N/A	- N/A	N/A	N/A	monitoring ongoing N/A	N/A	N/A	N/A	N/A	N/A
Terminal 4 St	2358	4.3 E	11040 N Lombard	Tom Gainer	PH Agr for RVSCE	RI	08/02/10	Other	N/A	N/A	N/A	N/A	none		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Linaton Plywood	2373	4.6 W	10504 NW St. Helens	Matt McClincy	PH Letter Agr for XPA (3/01)	NFA.	03/13/06	Overland Transport/Sheet Flow	Completed			SCM addressed this potentially complete pathway	Low		EPA reviewed and commented		independent removal of two small upland source areas and offsite disposal in 2002	Received review 8/29/03					Received review 8/29/03	
Linnton Ptywood	2373	4.6 W	10504 NW St Helens	Matt McClincy	PH Letter Agr for XPA (3/01)	NFA	03/13/06	Bank Erosion	Completed			Insignificant pathway; no actions recommended	LON		EPA reviewed and commented		No SCM needed	Danahad raving		TO THE			Received review 8/29/03	
Linnton Plywood	2373	4.5 W	10504 NW SI Helens	Matt McClincy	PH Letter Agr for XPA (3/01)	NFA	03/13/06	Groundwater	Completed			Insignificant pathway, no actions recommended	Low	Low	EPA reviewed and commented		No SCM needed	Received review 8/29/03					Received review 8/29/03	
Linnton Plywood	2373	4.5 W	10504 NW St Helens	Matt McClincy	PH Letter Agr for XPA (3/01)	NFA	03/13/06	Stormwater	Completed			Insignificant pathway, no actions recommended	Low		EPA reviewed and commented	EL RIVE	Ongoing Stormwater BMPs and monitoring	Received review 8/29/03					Received review 8/29/03	
Linnton Plywood	2373	4.6 W	10504 NW St Helens	Matt McClincy	PH Letter Agr for XPA (3/01)	NFA	03/13/06	Overwater Activities	Completed			Insignificant pathway; no actions recommended	Low		EPA reviewed and commented		No SCM needed	Received review 8/29/03					Received review 8/29/03	Harris Harris
Linaton Plywood	2373	4.6 W	10504 NW St Helens	Matt McClincy	PH Letter Agr for XPA (3/01)	NFA	03/13/06	Other	N/A	N/A	N/A	N/A	none		N/A		N/A					10.4	N/A	
Terminal 4 SI	ip 272	4.6 E	10400 Lombard	Tom Gainer	Judgment for RD/RA (4/04)	RD/RA	08/02/10	Overland Transport/Sheet Flow	N/A	N/A - see Bank Erosion and Stormwater pathways	N/A	N/A	none		N/A	N/A	N/A	N/A	N/A	N/A	N/A Excavation and capping	N/A	N/A	N/A
Terminal 4 Si	lip 272	4.8 E	10400 Lombard	Torn Gainer	Judgment for RD/RA (4/04)	RDIRA	06/02/10	Bank Erosion	Completed			Pencil pitch observed and PAHs detected in over bank solls above PECs			Spring 2009		Excavation and capping	Spring 2009			at 1 of 3 areas (fall 2009); remaining 2 area to be implemented with Phase II Early Action	1 of 3 areas completed 2009		
Terminal 4 Si	lp 272	4.6 E	10400 Lombard	Tom Gainer	Judgment for RD/RA (4/04)	RDIRA	08/02/10	Groundwater	Completed			Complete pathway - remedy recommended and implemented	Medium	Medium	EPA reviewed and commented, 2/200		Bank excavation and backfill remedial action NAPL recovery monitoring	EPA reviewed and	Bank excavation an backfit remediat action (BEBRA) 11/04	d 2,700 cubic yards o contaminated soil removed; 30.2 gallons NAPL recovered to date				
Terminat 4 Si	Sp 272	4.6 E	10400 Lomberd	Tom Gainer	Judgment for RD/RA (4/04)	RD/RA	08/02/10	Stormwater	Ongoing	Stormwater sampling ongoing	4th Quarter 2011	Complete pathway, BMPs in place	p Med		Walting on SCE to be completed									
Terminal 4 S	āp 272	4.6 E	10400 Lombard	Tom Gainer	Judgment for RD/RA (4/04)	RD/RA	08/02/10	Overwater Activities	N/A	N/A - Historic releases to be addressed by the in-water T4 Early Action	N/A	N/A	none		N/A	N/A	N/A	N/A	N/A	N/A	N/A:	N/A	N/A	N/A
Terminal 4 S	214	4.6 E	10400 Lombard	Tom Gainer	Judgment for RD/RA (4/04)	RD/RA	08/02/10	Other	N/A	N/A	N/A	N/A	none		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
UPRR St Johns Tank Farm		7 4.6 E	6908 N Roberts	Jim Anderson	Pre-PH VCP Letter A	or NFA	03/07/06	Overland Transport/Sheet Flow	N/A	N/A	N/A	N/A	none	110	N/A	N/A	N/A	N/A	N/A	N/A	N/A	NIA	N/A	NA

		7	suspected s mation	ources of	contamination to t	he river t status				Source Con	trol Evalu	uation (SCE)	į.			Source	Control	Decisions	(SCDs) ar	nd Status o	f Source Co	ntrol M	easures	(SCMs)
		Phone			Type of agreement		Date last		5273 745	V20 S500 5 Ltd	223,000/1	Basis for determination is no		ce control	Status of EPA	Source control			200000000000000000000000000000000000000	no a consecuta de processos.	Additonal Proposed	- Name -	Status of EPA	
Site name	ECSI#	River	Address	DEQ PM	directing source control	Project status	modified (m-d-y)	SCE Pathway	Status of SCE	Major SCE tasks to be completed	Schedule for completing SCE		Pathway priority level	Site priority level	review of SCE	alternatives evaluation and schedule (m-y)	Selected SCMs	Status of EPA review of SCM selection decision	SCM activities completed to date (m-y)	Mass or volume of contaminants controlled	SCM activities to be done and schedule (m- y)	Date SCM completed (m-y)	review of completed SCM	Operation and maintenance requirements
UPRR St Johns Tank Farm	2017	4.6 E	6908 N Roberts	Jim Anderson	Pre-PH VCP Letter Agr	NFA	03/07/06	Bank Erosion	N/A	N/A	NA	NA	none		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
UPRR SI Johns Tank Farm	2017	4.8 E	6908 N Roberts	Jim Anderson	Pre-PH VCP Letter Agr	NFA	03/07/06	Groundwater	Completed			Insignificant pathway; no actions recommended	Low	Low	SCE submitted to EPA April 2004, no comments received		No SCM needed							
UPRR SI Johns Tank Farm	2017	46E	6908 N Roberts	Jim Anderson	Pre-PH VCP Letter Agr	NFA	03/07/06	Stormwater	Completed			Insignificant pathway, no actions recommended	Low		SCE submitted to EPA April 2004, no comments received		No SCM needed		5 10 2027					
UPRR St Johns Tank Farm	2017	4.6 E	6908 N Roberts	Jim Anderson	Pre-PH VCP Letter Agr	NFA	03/07/06	Overwater Activities	N/A	NA	N/A	N/A	none		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
UPRR St Johns Tank Farm	2017	4.6 E	6908 N Roberts	Jim Anderson	Pre-PH VCP Letter Agr	NFA	03/07/06	Other	N/A	N/A	N/A	N/A	none	Post!	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
BP Terminal 22T (ARCO)	1528	4.8W	9930 NW St Helens	Tom Gainer	PH Agr for RUSOM (6/00)	RI	08/02/10	Overland Transport/Sheet Flow	N/A	NA	N/A	N/A	none		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
BP Terminal 22T (ARGO)	1528	4.8W	9930 NW SI Helens	Tom Gainer	PH Agr for RI/SCM (8/00)	RI	08/02/10	Bank Erosion	N/A	No Bank -concrete sea wall	N/A	N/A	none		NIA	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
BP Terminal 22T (ARCO)	1528	4.8W	9930 NW St Helens	Tom Gainer	PH Agr for RI/SCM (5/00)	Ri	08/02/10	Groundwater	Completed			Free product & dissolved phase potentially reaching river	High	Mak	EPA reviewed and commented 2007	alternatives evaluation completed 3//2007 for on site GW	New sheetpile barrier wall with hydraulic control and GW pump &	EPA reviewed 3/2007	Hydraulic Control system installed 1/2005, new shreetpile seawall	700 linear feet of plume controlled at riverbank		11/08		Reconfamination evaluation due 4th quart 2010
BP Terminal 22T (ARCO)	1528	4.8W	9930 NW St Helens	Tom Gainer	PH Agr for RI/SCM (6/00)	Ri	08/02/10	Stormwater	Ongoing	Sampling stormwater system	4th Quarter 2010	Waiting on SCE to be completed	to be determined	High	Walting on SCE to be completed.		treat system		11/2007					
SP Terminal 22T (ARCO)	1528	4.8W	9930 NW St Helens	Tom Gainer	PH Agr for RI/SCM (8/00)	RI	08/02/10	Overwater Activities	N/A	NA	N/A	No known current sources (spills reported to OERS)	none		N/A	N/A	N/A	N/A.	N/A	N/A	N/A	NA	N/A	N/A
SP Terminal 12T (ARCO)	1528	4.8W	9930 NW Si Helens	Tom Gainer	PH Agr for RVSCM (6/00)	RI	68/02/10	Near shore sediment	N/A	NIA	N/A	N/A	none		N/A	alternatives evaluation for near-shore sediment completed 3/07	Revetment and near-shore sediment removal and off-	EPA reviewed 3/07	Sediment removal complete 11/08	16,300 CY sediment	Final grading and planting summer 2009	11/08	TBD	Recontamination evaluation
Port of ordand Auto lorage Area (ASA)	172	5.0 E	10400 Lombard	Tom Gainer	Pre-PH DEQ/Port IGA (11/00)	NFA	03/06/06	Overtand Transport/Sheet Flow	N/A	N/A	N/A	NA	none		N/A	N/A	site disposal	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Port of ortland Auto Rorage Area (ASA)	172	5.0 E	10400 Lombard	Tom Gainer	Pre-PH DEQ/Port IGA (11/00)	NFA	03/06/06	Bank Erosion	Completed		du H	Insignificant pathway, no actions recommended	Low		EPA reviewed and commented 6/04		No SCM needed		Li Live					
Port of ortland Auto lorage Area (ASA)	172	5.0 E	10400 Lombard	Tom Gainer	Pre-PH DEQ/Port IGA (11/00)	NFA	03/06/06	Groundwater	Completed			Insignificant pathway, no actions recommended	Low		EPA reviewed and commented 6/04		No SCM needed						4	
Port of ortland Auto torage Area (ASA)	172	5.0 E	10400 Lombard	Tom Gainer	Pre-PH DEQ/Port IGA (11/00)	NFA	03/06/06	Stormwaler	Completed			Insignificant pathway, no actions recommended	Low	Low	EPA reviewed and commented 6/04		No SCM needed						Sales	
Port of orliand Auto torage Area (ASA)	172	5.0 E	10400 Lombard	Tom Gainer	Pre-PH DEQ/Port IGA (11/00)	NFA	03/06/06	Overwater Activities	N/A	N/A	N/A	No known current sources (spills reported to OERS)	none		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Port of ortland Auto torage Area (ASA)	172	5.0 E	10400 Lombard	Tom Gainer	Pre-PH DEQ/Port IGA (11/00)	NFA	03/06/06	Other	N/A	N/A	N/A	N/A	none		N/A	N/A	N/A	NA	NA	N/A	N/A	N/A	N/A	N/A
BdoM naoci	137	5.1 W	9420 NW St Helens	Tom Gainer	VCP Agr for Remedial Action (5/02)	RD/RA	08/02/10	Overland Transport/Sheet Flow	N/A	N/A	N/A	N/A.	none		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Boom Mobil	137	5,1 W	9420 NW St Helens	Tom Gainer	VCP Agr for Remedial Action (5/02)	RD/RA	08/02/10	Bank Erosion	N/A	N/A	N/A	N/A	none		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	NA
boon Mobil	137	5.1 W	9420 NW St Halens	Tom Gainer	VCP Agr for Remedial Action (5402)	RD/RA	08/02/10	Groundwater	Completed			Groundwater is a complete pathway	High	High	DEQ issued a ROD in 1997 requiring groundwater treatment	DEQ issued a ROD in 1997 requiring groundwater freatment	Operating air sparge & SVE system. Expansion of air sparge system (1/2005) - Additional GW hydraulic control planned for flydraulic gap area in 4th quarter 2010	Possibility only if remedy is shown not to be protective and attenutive remedial action is proposed			Addisonal SCMs in hydrusic gap at downstream end of size planned for 4th quarter 2010			Sylem inspection , operition, and effectiveness monitoring onoising
boon Mobil	137	5.1 W	9420 NW St Helena	Tom Gainer	VCP Agr for Remedial Action (5/02)	ROIRA	08/02/10	Stormwater	Pending EPA Review	Current facility owner NuStar will conduct SCE for bulk plant, ExonMobil will conduct SCE at their Lube Plant	2nd Quarter 2011	Waiting on SCE to be completed	to be determined					MARI			PER SA			

		ned or s		urces of	contamination to the					Source Cont	rol Evalu	ation (SCE)				Source	Control	Decisions	(SCDs) an	d Status o	f Source Co	ntrol M	easures	(SCMs)
Site name	ECC14	River	Address	DEQ PM	Type of agreement directing source control	Project status	Date last modified (m-d-y)	SCE Pathway	Status of SCE	Major SCE tasks to be completed	Schedule for completing SCE	Basis for determination is nee	ded Pathway	Site priority level	Status of EPA review of SCE decision	Source control alternatives evaluation and schedule (m-y)	Selected SCMs	Status of EPA review of SCM selection decision	SCM activities completed to date (m-y)	Mass or volume of contaminants controlled	Additonal Proposed SCM activities to be done and schedule (m- y)	Date SCM completed (m-y)	Status of EPA review of completed SCM	Operaton and maintenance requirements
Execut Mobile	157	5.1 W	9420 NW St Helens	Tom Gainer	VCP Agr for Remedial Action (5/02)	RDIRA	08/02/10	Overwater Adhibes	NA	N/A	N/A	No known current sources (spills reported to OERS)	none		N/A	NA	N/A	NA	NA	N/A	N/A	N/A	N/A	N/A
Eleon Mobil	137	5.1 W	9420 NW St Helens	Tom Galner	VCP Agr for Remedial Action (5/02)	RDIRA	06/02/10	Other	Not Started	N/A	N/A	N/A	to be determined								ALEXT Y			
Olympic Pipeline Portland Facility within ExponMobil	3342	5.2W	9420 NW St Helens	Tom Gainer	KCP	ХРА	02/19/09	Overland Transport/Sheet Flow	NA	N/A	NIA	NA	nore		N/A	N/A	N/A	N/A	N/A	N/A	NA	N/A	N/A	NA
Otympic Pipeline Portland Facility within ExponMobil	3342	5.2W	9420 NW St Helens	Tom Gainer	ICP	XPA	08/02/10	Bank Erosion	N/A	N/A	N/A	N/A	none		NA	N/A	NIA	N/A	N/A	N/A	NA	N/A	NIA	NA
Olympic Pipeline Portland Facility within ExponMobil	3342	5.2VV	9420 NW St Helens	Tom Gainer	KP	ХРА	08/02/10	Groundwater	Completed			Insignificant pathway; no actions recommended	pLow	plow	Waiting on SCE completion		Conducted soil removal following petroleum spill is mid 1990s							
Olympic Pipeline Portland Facility within ExpnMobil	3342	5.2W	9420 NW St Helens	Tom Gainer	ICP	ХРА	08/02/10	Stormwater	Ongoing	Dependent upon groundwater conditions	4th Quarter 2011	Waiting on SCE to be completed	to be determined	p.com	Waiting on SCE completion									
Olympic Pipeline Portland Facility within ExenMobil	3342	5.2W	9420 NW St Helens	Tom Gainer	ЮР	ХРА	08/02/10	Overwater Activities	N/A	N/A	NIA	N/A	none		NIA	N/A	NA	NA	N/A	N/A	N/A	N/A	N/A	N/A
Olympic Pipeline Portland Facility within	3342	5.2W	9420 NW St Helens	Tom Gainer	ICP	XFA	08/02/10	Other	N/A	N/A	N/A	N/A	none		NA	N/A	N/A	NA	NA	N/A	N/A	N/A	N/A	N/A
Shore Terminals (aka NuStar and Valero was	5130	5.4W	9400 NW St Helens Rd	Jim Orr	VCP Agreement for Stormwater Assessment & Source Control	SCE	07/29/10	Overland Transport/Sheet Flow	Not Started	Source Control Evaluation Assessment SOW under review implimentation fall 2010	2nd Quarter 2011	Pathway derermination	to be determined		Waiting on SCE completion March 2011									
Shore Terminals (aka NuStar and Valero was	5130	5.4W	9400 NW St Helens Rd	Jim Orr	VCP Agreement for Stormwater Assessment & Source Control	SCE	07/29/10	Bank Erosion	Not Started	Source Control Evaluation Assessment SOW under review	2nd Quarter 2011	Pathway is complete	p Med		Waiting on SCE completion March 2011									
Shore Terminals (aka NuStar and Valero was ECSI #1989)	5130	5.4W	9400 NW St Helens Rd	Jim Orr	VCP Agreement for Stormwater Assessment & Source Control	SCE	07/29/10	Groundwater	Not Started	Source Control Evaluation Assessment SOW under review	2nd Quarter 2011	Pathway is complete	p Med	p Med	Waiting on SCE completion March 2011									
Shore Terminals (aka NuStar and Valero was ECSI #1969)	5130	5.4W	9400 NW St Helens Rd	Jim Orr	VCP Agreement for Stormwater Assessment & Source Control	SCE	07/29/10	Stormwater	Not Started	Source Control Evaluation Assessment SOW under review implimentation fail 2010	2nd Quarter 2011	to be determined	to be determined		Waiting on SCE completion March 2011									
Shore Terminals (aka NuStar and Valero was ECSI #1989)	5130	5.4W	9400 NW St Helens Rd	Jim Orr	VCP Agreement for Stormwater Assessment & Source Control	SCE	07/29/10	Overwater Activities	Not Started	Source Control Evaluation Assessment SOW under review	2nd Quarter 2011	to be determined	to be determined		Waiting on SCE completion March 2011									
Shore Terminals (ake NuStar and Valero was	5130	5.4W	9400 NW St Helens Rd	Jim Orr	VCP Agreement for Stormwater Assessment & Source Control	SCE	07/29/10	Loading Rack investigation	Ongoing	Characterization of releases from loading rack	to be determined	to be determined	to be determined		Waiting on SCE completion									
Brix Maritime (aka Foss)	2364	5.5 W	9030 NW St Helens	Jim Orr	PH Agr for RI/SCM (5/02)	RVSCE	07/29/10	Overland Transport/Sheet Flow	N/A	NA	N/A	N/A	none		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Brix Maritime (aka Foss)	2364	5.5 W	9030 NW St Helens	Jim Orr	PH Agr for RI/SCM (5/02)	RVSCE	07/29/10	Bank Erosion	Ongoing	Eyaluated as part of SCE	4th Quarter 2011	Not believed to be a complete pathway	p i.ow		Waiting on SCE to be completed									
Brix Maritime (aka Foss)	2364	5.5 W	9030 NW St Helens	Jim Orr	PH Agr for RVSCM (5/02)	RVSCE	07/29/10	Groundwater	Ongoing	SCE Report Under Development	4th Quarter 2011	Pathway is complete	pMed	p Med	Waiting on SCE to be completed									
Brix Maritime (aka Foss)		5.5 W	9030 NW St Helens	Jim Orr	PH Agr for RVSCM (5/02)	RIFSCE	07/29/10	Stormwater	SCE Report is being Produced. All data collected	Catch basin sediment sampling/screening for site COt plus PCBs and phthatates, and follow-up storm water sampling per JSCS.	4th Quarter 2011	to be determined	to be determined		Waiting on SCE to be completed									
Brix Markime (aka Foss)		5.5 W	9030 NW St Helens	Jim Orr	PH Agr for RI/SCM (5/02)	RIFSCE	07/29/10	Overwater Activities	N/A	N/A	N/A	No known current sources (spills will be reported to OERS)	none		Waiting on SCE to be completed									
Brtx Maritime (aka Foss)		5.5 W	9030 NW St Helens	Jim Orr	PH Agr for RVSCM (5/02)	RVSCE	07/29/10	Other	N/A	N/A	N/A	N/A	none		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

			suspected s	sources of	contamination to t	the river	,			Source Cor	ntrol Evalu	uation (SCE)				Source	e Control	Decisions	(SCDs) ar	nd Status o	of Source Co	ntrol M	loaguraa	(CCNo)
				Π	Type of agreement		Date last					Basis for determination	on that source	e contro				Decisions	(CODS) al	lu Status C		TUTOTIV		(SCIVIS)
Site name	ECSI#	River	Address	DEQ PM	directing source control	Project status	modified (m-d-y)	SCE Pathway	Status of SCE	Major SCE tasks to be completed	Schedule for completing SCE	Pathway determination	Pathway priority level	Site priority level	y decision	Source control alternatives evaluation and schedule (m-y)	Selected SCMs	Status of EPA review of SCM selection decision	SCM activities completed to date (m-y)	Mass or volume of contaminants controlled	Additonal Proposed SCM activities to be done and schedule (m- y)	Date SCM completed (m-y)	Status of EPA review of completed SCM	Operaton and maintenance requirements
Mar Com Marine (N Parcel)	4797	5.8 E	8790 N Bradford	Mike Romero	PH Agr for RVSCM (11/01)	NFA	03/06/09	Overland Transport/Sheet Flow	Completed			overland soil transport suspected migration pathway	Low		EPA reviewed and commented 2004	alternatives evaluation completed in 2004	removal of 278 cubic yards of sandblast grit and soit, DEQ issues SCD in	EPA reviewed and approved 2004	2007	278 CY soil	Port of Portland conderned property, Port conducted soil removal as prescribed in ROD 5/07		EPA commented 5/08	None
Mar Com Marine (N Parcel)	4797	5.6 E	8790 N Bradford	Mike Romero	PH Agr for RVSCM (11/01)	NFA	03/05/09	Bank Erosion	Not Started			Deferred investigation of beach to Mar Com South Parcel	p Med				Deferred investigation of beach to Mar Com South Parcel							
Mar Com Marine (N Parcel)	4797	5.6 E	8790 N Bradford	Mike Romero	PH Agr for RVSCM (11/01)	NFA	03/06/09	Groundwater	Completed			Insignificant pathway, no actions recommended	Low	p Med	EPA reviewed and commented 2004		N/A							
Mar Com Marine (N Parcel)	4797	5.6 E	8790 N Bradford	Mike Romero	PH Agr for RI/SCM (11/01)	NFA	03/06/09	Stormwater	Completed			Insignificant pathway, no actions recommended	Low		EPA reviewed and commented 2004		N/A							
Mar Com Marine (N Parcel)	4797	5.6 E	8790 N Bradford	Mike Romero	PH Agr for RVSCM (11/01)	NFA	03/06/09	Overwater Activities	N/A	N/A	N/A	N/A	none		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Mar Com Marine (N Parcel)	4797	5.6 E	8790 N Bradford	Mike Romero	PH Agr for RI/SCM (11/01)	NFA	03/06/09	Other	N/A		N/A	N/A	none		N/A	NA	N/A	N/A	NA	N/A	N/A	N/A	N/A	N/A
Marine inance, AKA Advanced American	2352	5.8 W	8444 NW St Helens	Mark Pugh	PPA	NFA	06/16/08	Overland Transport/Sheet Flow	Completed			contaminated over screening criteria in soil potentially susceptible to runoff	Low		SCE submitted to EPA 9/30/04. No comments received.	alternatives evaluation completed 2004	Dig and haul soil contamination; capping with clean fill and/or building	SCM submitted to EPA 9/2004, no comments received	Soil removed 08/05; selected site areas capped with building and/or clean fill	1,150 cubic yards of soil removed (estimated); report pending		11/05	SCD submitted to EPA July 18, 2007.	Instituional control for ca and building will be required.
Marine inance, AKA Advanced American	2352	5.8 W	8444 NW St Helens	Mark Pugh	PPA	NFA	80/81/80	Bank Erosion	Completed			Insignificant pathway, no actions recommended	Low		SCE submitted to EPA 9/30/04. No comments received.	alternatives evaluation completed 2004	No SCM needed						SCD submitted to EPA July 18, 2007.	N/A
Marine inance, AKA Advanced American	2352	5.8 W	8444 NW St Helens	Mark Pugh	PPA	NFA	06/16/08	Groundwater	Completed			Insignificant pathway, no actions recommended	Low		SCE submitted to EPA 9/30/04. No comments received.	alternatives evaluation completed 2004	No SCM needed						*SCD submitted to EPA July 18, 2007.	N/A
Marine nance, AKA Advanced American	2352	5.8 W	8444 NW St Helens	Mark Pugh	PPA	NFA	06/16/08	Stormwater	completed			Insignificant pathway, no actions recommended	Low	Low	N/A	N/A	N/A	N/A	N/A	NA	Storm drain system was installed in May 2006; 3 storm water sampling events complete. I more pending.		*SCD submitted to EPA July 18, 2007.	N/A
Marine nance, AKA Advanced American	2352	5.8 W	8444 NW St Helens	Mark Pugh	PPA	NFA	06/16/08	Overwater Activities	N/A	N/A	N/A	No known current sources (spills reported to OERS)	none		N/A	NA	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Marine nance, AKA Advanced American	2352	5.8 W	8444 NW St Helens	Mark Pugh	PPA	NFA	06/16/06	Other	NA	NA	N/A	N/A	none		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
far Com (S Parcel)	2350	5.8 E	8790 N Bradford	Mike Romero	PH Agr	RI	06/30/10	Overland Transport/Sheet Flow	Ongoing	Reviewing revised SCE	Pending review	Complete	p High		To be determined									
far Com (S Parcel)	2350	5.8 E	8790 N Bradford	Mike Romero	PH Agr	RI	08/30/10	Bank Erosion	Ongoing	Reviewing revised SCE	Pending review	ТВО	p Med		To be determined			-8-8-1		W. 184				
tar Com (S Parcel)	2350	58E	8790 N Burgard	Mike Romero	PH Agr	RI	06/30/10	Groundwater	Ongoing	Reviewing revised SCE	Pending review	TBD	p Med		To be determined									
tar Com (S Parcel)	2350	5.8 E	8790 N Bradford	Mike Romero	PH Agr	Ri	06/30/10	Stormwater	Ongoing	Reviewing revised SCE	Pending review	тво	to be determined	p High	To be determined						4-1-1-1-1			
lar Com (S Parcel)	2350	58E	8790 N Bradford	Mike Romero	PH Agr	Ri	06/30/10	Overwater Activities	N/A	No current overwater activities, only historic	N/A	NA	N/A		N/A		Floating dry dock sold in 2004, and removed from site							
lar Com (S Parcel)	2350	5.8 E	8790 N Bradford	Mike Romero	PH Agr	RI	06/30/10	Other:	N/A	NA	NA	NA	none		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
S Water Lab	2452	6.0E	6543 N Burlington	Mark Pugh	IGA	NFA	05/25/10	Overland Transport/Sheet Flow	Completed	none	Complete	Insignificant pathway, no actions recommended	Low		EPA has reviewed and commented on SCD	no alternatives evaluation needed					no alternatives evaluation needed	no alternatives evaluation	no alternatives evaluation needed	no alternatives evaluation needed
S Water Lab	2452	6.0E	6543 N Burlington	Mark Pugh	IGA	NFA	05/25/10	Bank Erosion	Completed	none	Complete	Insignificant pathway, no actions recommended	Low		EPA has reviewed and commented on SCD	no alternatives evaluation needed	R.B.	House by the				needed	13.6	

				ources of	contamination to the					Source Conf	trol Evalu	ation (SCE)				Source	Control	Decisions	(SCDs) an	d Status o	f Source Cor	ntrol M	easures	(SCMs)
Site name		Pissar	Address	DEQ PM	Type of agreement directing source control	Project status	Date last modified (m-d-y)	SCE Pathway	Status of SCE	Major SCE tasks to be completed	Schedule for completing SCE	Basis for determination is nee	ded Pathway		Status of EPA review of SCE decision	Source control alternatives evaluation and schedule (m-y)	Selected SCMs	Status of EPA review of SCM selection decision	SCM activities completed to date (m-y)	Mass or volume of contaminants controlled	Additonal Proposed SCM activities to be done and schedule (m- y)	Date SCM completed (m-y)	Status of EPA review of completed SCM	Operaton and maintenance requirements
ES Water Lat	2452	6.0E	6543 N Burlington	Mark Pugh	IGA	NFA	05/25/10	Groundwater	Completed	none	Complete	determination Insignificant pathway, no actions recommended	Low	level	EPA has reviewed and commented on	no alternatives evaluation needed	E BALL							e seim
ES Water Lat			6543 N	Mark Pugh	IGA	NFA	05/25/10	Stormwater	Completed	none	Complete	Insignificant pathway, no actions recommended	Low	Low	SCD EPA has reviewed and commented on	no atternatives evaluation needed								30 . v 15
S Water Lat			Burlington 6543 N Burlington	Mark Pugh	IGA	NFA	05/25/10	Overwater Activities	Completed	N/A	N/A	No known current sources (spills will be	Low		SCD EPA has reviewed and commented on SCD	no afternatives evaluation needed				MILE STATE			21.1	
ES Water Lat			6543 N Burlington	Mark Pugh	IGA	NFA	05/25/10	Other	Completed	N/A	N/A	No known current sources (spills will be reported to OERS)	Low		EPA has reviewed and commented on SCD	no alternatives evaluation needed								
JS Moorings	1641	6.2W	8010 NW St. Helens Rd.	Mark Ader EPA	Federal RCRA Order	FS	08/02/10	Overland Transport/Sheet Flow	Completed			reported to 0.0.10)			EPA preparing proposed Plan October 2010									
S Moorings	1641	6.2W	8010 NW St. Helens Rd.	Mark Ader EPA	Federal RCRA Order	FS	08/02/10	Bank Erosion	Completed						EPA preparing proposed Plan October 2010									
JS Moorings	1641	6.2W	8010 NW St. Helens Rd.	Mark Ader EPA	Federal RCRA Order	FS	08/02/10	Groundwater	Completed						EPA preparing proposed Plan October 2010 EPA preparing									
JS Moorings	1641	6.2W	8010 NW St. Helens Rd.	Mark Ader EPA	Federal RCRA Order	FS	08/02/10	Stormwater	Completed						proposed Plan October 2010 EPA preparing									
US Moorings	1641	8.2W	8010 NW St. Helens Rd.	Mark Ader EPA	Federal RCRA Order	FS	08/02/10	Overwater Activities	Completed						proposed Plan October 2010 EPA preparing									
US Moorings	1641	6.2W	8010 NW St. Helens Rd.	Mark Ader EPA	Federal RCRA Order	FS	08/02/10	Other	Completed						proposed Plan October 2010		Work plan to							
Crawford Street Corp	2363	6.3 E	84248 N Grawford	Shawn Rapp	PH Letter Agr for XPA (11/99)	XPA	07/01/10	Overland Transport/Sheet Flow	Ongoing	See Stormwater Pathway	2nd Quarter 2011	Waiting on SCE to be completed	to be determined		Waiting on SCE completion		sample erodible surface solls approved; results pending							0 2 3 1
Crawford Sireet Corp	2363	6.3 E	84248 N Crawford	Shawn Rapp	PH Letter Agr for XPA (11/99)	хра	07/01/10	Bank Erosion	Ongoing	Bank characterization underway	2nd Quarter 2011	Waiting on SCE to be completed	to be determined		Walling on SCE completion		RP removed black sand from beach and bank in 10/01. Residual contamination exists on beach, deferred to inwater RI. Bank was replaced with clean fill.							
Crawford Street Corp	2363	63E	84248 N Crawford	Shawn Rapp	PH Letter Agr for XPA (11/99)	XPA	07/01/10	Groundwater	Ongoing	None	2nd Quarter 201	insignificant pathway, no actions recommended	ptow	pLow	Waiting on SCE completion									
Crawford Street Corp	2363	63E	84248 N Crawford	Shawn Rapp	PH Letter Agr for XPA (11/99)	ХРА	07/01/10	Stormwater	Ongoing	Storm water sampling per JSCS	2nd Quarter 201	Waiting on SCE to be completed	to be determined	4	Waiting on SCE completion		RP currently evaluating possible stormwater piping and seep sources							
Crawford Street Corp	2363	0.3 E	84248 N Crawford	Shawn Rapp	PH Letter Agr for XPA (11/99)	XPA	07/01/10	Overwaler Activities	N/A	NA	NIA	N/A	0016	No.	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Crawford Street Corp		6.3 E	84248 N Crawford	Shawn Repp	PH Letter Agr for XP/ (11/99)	хра	07/01/10	Other	N/A	N/A	N/A	N/A	none		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
NW Natural "Gasco" Site	. RA	8.4 W	7000 NW S		Pre-PH VCP Agr for RVFS (8/94) amende 7/05	d Ri	10/30/10	Overland Transport/Sheet Flow	Completed	None	4th Quarter 201	Pathway potentially complete	plow		NA	Potential runoff in eastern corner of site w be controlled by future bank remedial work which will be EPA lead	N/A	N/A	NA	N/A	N/A	N/A	N/A	N/A
NW Natural *Gasco* Sã		641	7900 NW S Helens	Dana Bayuk	Pre-PH VCP Agr to RIFS (8)94) amende 7/06		07/30/10	Bank Erosion	Completed	N/A, NW Natural moving forward with source control	N/A, NW Natural submitted SCM evaluation (FFS	Pathway is complete	Hgh		N/A	SCM Evaluation (FFS) received 11/07, DEQ review complete (3/08)	Depending on location, riverbank SCM to include bain regrading, reparemoval, and replacement combined with shallow groundwater controls.	EPA comments received 2/08			NW Natural, EPA, and DEG agreed riverbank remediation will take place concurrently with the construction phase the NW Natural & Saltronic in-water sediment action, both so ownseen by EPA. AOC for in-water work finalized 9/09.	n of		

			r suspected :	sources of	f contamination to t	he river				Source Con	trol Evalu	uation (SCF)				Source	Control	Decisions	(SCDs) as	d Ctatus s	f Causas Cau			(0011.)
_	T	1	I		Projec	t status						Basis for determinati		e control		Journe	Control	Decisions	(SCDS) at	iu Status o	f Source Cor	itroi IV	easures	(SCMs)
Site name	ECSI	River mile	Address	DEQ PM	Type of agreement directing source control	Project status	Date last modified (m-d-y)	SCE Pathway	Status of SCE	Major SCE tasks to be completed	Schedule for completing SCE	is ne	Pathway		Status of EPA review of SCE	Source control alternatives evaluation and schedule (m-y)	Selected SCMs	Status of EPA review of SCM selection decision	SCM activities completed to date (m-y)	Mass or volume of contaminants controlled	Additional Proposed SCM activities to be done and schedule (m- y)	Date SCM completed (m-y)	Status of EPA review of completed SCM	Operaton and maintenance requirements
NW Natural "Gasco" Site	84	6.4 W	7000 NW SI Helens	Dana Bayuk	Pre-PH VCP Agr for RIFS (8/94) amended 7/06	RI	07/30/10	Groundwater	Completed	N/A, NW Natural submitted SCM Evaluation (FFS)	N/A N/W Natural submitted SCM Evaluation	Pathway is complete	High	High	NA	SCM Evaluation (FFS) submitted 11/07, DEQ review complete 3/08	Vertical barrier in most contaminated shoreline area (Segment 1), hydraulic containment along site shoreline (segments 1 and 2), and DNAPL removal beneath former effluent ponds	EPA comments received 2/08	Preliminary design received (8/08); DEQ review complete (8/08), interim Design received (11/09); DEQ review complete (2/10), DEQ conditionally approved Segment 2 design. Due to DNAPL concerns and timing of implementation DEQ deferred source control along "Gasco" portion of Segment 1 to uplands FS.		NW Natural formally disputing DEQ Segment 1 source control decision.			
NW Natural "Gasco" Ste		6,4 W	7900 NW St Helens	Dana Bayuk	Pre-PH VCP Agr for RVFS (8/94) amended 7/06	Ri	07/30/10	Stormwater	Ongoing	Complete stormwater & catch basin sampling report for JSCS screening purposes.		Pathway is complete	to be determined		Waiting on SCE to be completed.									
NW Natural "Gasco" São	84	6.4 W	7900 NW St Helens	Dana Bayuk	Pre-PH VCP Agr for RVFS (8/94) amended 7/08	Ri	07/30/10	Overwater Activities	N/A	N/A	N/A	No known current sources (spills reported	none		N/A	N/A		N/A	N/A	N/A	N/A	N/A	N/A	N/A
NW Natural - "Gasco" São	84	6.4 W	7900 NW St Helens	Dana Bayuk	Pre-PH VCP Agr for RVFS (8/94) amended 7/06	RI	07/30/10	Other - Koppers NPDES Permit	Ongoing	Complete catch basin sediment sampling report for JSCS screening purposes.	4th Quarter 2010	to OERS) Waiting on SCE to be completed	to be determined		Waiting on SCE to be completed									No.
Koppers Inc	2348	8.5 W	7540 NW St. Helens Rd.	Dana Bayuk			07/30/10	Overland Transport/Sheet Flow																
Koppers Inc	2348	6.5 W	7540 NW St. Helens Rd.	Dana Bayuk			07/30/10	Bank Erosion																
Koppers Inc	2348	6.5 W	7540 NW St. Helens Rd.	Dana Bayuk			07/30/10	Groundwater																
Koppers Inc	2348	6.5 W	TEAD ABALON	Dana Bayuk	Part of NW Natural		07/30/10	Stormwater						to be								-		
Koppers Inc	2348	6.5 W	TEAD ADALON	Dana Bayuk	"Gasco" Site; see ESCI #84		07/30/10	Overwater Activities						determin ed										
Koppers Inc	2348	6.5 W	7540 NW St. Helens Rd.	Dana Bayuk		Ongoing	07/30/10	Other - Koppers NPDES- Permit	Ongoing	Complete catch basin sediment sampling report for JSCS screening purposes.	4th Quarter 2010	Waiting on SCE to be completed	to be determined		Waiting on SCE to be completed									
NW Natural - *Siltronic MGP* Site	183	6.6 W	7700 NW Front	Dana Bayuk	Joint NW Natural/Sitronic Order (10/00) & Amendment #1 (7/09) to Pre-PH VCP Agr for RIFS (8/94)	RI	08/02/10	Overland Transport/Sheet Flow	N/A	NA.	NA	N/A	none		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
NW Natural - "Sitronic MGP" Site	183	66W	7700 NW Front	Dana Bayuk	Joint NW Natural/Sitronic Order (10.00) & Amendment #1 (7/00) to Pre-PH VCP Agr for RIFS (8/94)	RI	08/02/10	Bank Erosion	Ongoing	Complete characterization of MGP wastalcontamination along shoreline per NW Natural's "Sitronic MGP Ste" Rt work plan approved 10/07.	to be determined	Walting on SCE to be completed	to be determined		Wating on SCE to be completed									
NW Natural - *Sitronic MGP* Site	183	66W	7700 NW Front	Dana Bayuk	Joint NW Natural/Sitronic Order (1000) & Amendment #1 (7/00) to Pre-Pt VCP Agr for RVFS (6/94)	RI	08/92/10	Groundwater	Sitronic parties of Segment 1 complete, Segment 3 engoing	MGP waste and contamination being investigated along shoreline updiream of Segment 1 (i.e., Segment 3) per MGP RI work plan. Review draft of Segment 3 SCE submitted 2/09.	4th Quarter 2010 (Segment 3 projected)	Pathway is complete	High	High		SCM Evaluation (FFS) received 11/07, including Siltronic portion of Segment 1; DEQ review complete (3:08)	Hydraulic containment of Satronic portion of Segment 1	EPA comments received 2/08	Preliminary design received (6008); DEC review complete (6008) interin design received (11009) DEC review complete (2110) DEC conditionally approved VIVI Naturals Interin design for two extraction wells along Sitronic portion of Segment 1.		NW Natural formally disputing DEQ Segment 1 source control decision for "Gasco" ste portion of Segment 1			
NW Natural - "Siltronic MGP" Site	183	6.6 W	7700 NW Front	Dana Bayuk	Joint NW Natural/Sitronic Order (10/00) & Amendment #1 (7/06) to Prs-PH VCP Agr for RIFS (8/94)	RI	08/02/10	Stormwater	Ongoing	Evaluate MGP waste-contamination in shallow sols per MGP RI work plan and combine with Siltronics stormwater system data.	4th Quarter 2010	Pathway is complete	to be determined		Waiting on SCE to be completed									

	Confirm	ed or s	suspected so	urces of	contamination to th	e river				Source Cont	rol Evalu	ation (SCE)				Source	Control	Decisions	(SCDs) an	d Status of	Source Cor	ntrol M	easures	(SCMs)
	Site	inform	nation		Project	status						Basis for determination is nee		control	Status of EPA	Source control		Status of EPA	SCM activities	Mass or volume of	Additional Proposed SCM activities to be	Date SCM	Status of EPA review of	Operaton and
Site name	ECSI#	River mile	Address	DEQ PM	Type of agreement directing source control	Project status	Date last modified (m-d-y)	SCE Pathway	Status of SCE	Major SCE tasks to be completed	Schedule for completing SCE	Pathway determination	Pathway	Site priority level	review of SCE decision	alternatives evaluation and schedule (m-y)	Selected SCMs	review of SCM selection decision	completed to date (m-y)	contaminants controlled	done and schedule (m- y)	completed (m-y)	completed SCM	maintenance requirements
NW Natural - Siltronic MGP Site	183	8.6W	7700 NW Front	Dana Bayuk	Joint NW Natural/Sitronic Order (10/00) & Amendment #1 (7/00) to Pre-PH VCP Agr for RIFS (8/94)	Rt	08/02/10	Overwater Activities	N/A	N/A	NA	NA	none	ievei	NA	NA	N/A	N/A	NA	NA	N/A	N/A	N/A	NA
NW Natural - Sitronic MGP Site	183	6.6 W	7700 NW Front	Dana Bayuk	Joint NW Natural/Sitronic Order (10:00) & Amendment #1 (7:00) to Pre-PH VCP Agr for RIFS (8:94)	Ri	08/02/10	Other - Doone Creek	Ongoing	Investigate COI contributions to Doane Creek & CRys OF- 22C per Sittronio MGP Site RI work plan (Summer 2010)	TBD pending results of bank soll, stream sediment, and surface water sampling proposed in MGP Rd	Pathway is complete	to be determined		Wating on SCE to be completed									
Sittronic Corp TCE Investigation	183	6.5 W	7200 NW Front	Dana Bayuk	VCP Order (2/04) & Joint NW Natural/Siltronic Order (10/00)	RI	08/02/10	Overland Transport/Sheet Flow	N/A	N/A, subsurface releases from UST system	N/A	N/A	none		N/A	N/A	NIA	N/A	N/A	N/A	N/A	NA	N/A	N/A
Sittronic Corp. TCE Investigation	183	esw	7200 NW Front	Dana Bayuk	VCP Order (2/04) & Joint NW Natural/Sitronic Order (10/00)	RI	08/02/10	Bank Erosion	N/A	N/A subsurface releases from UST system	NA	N/A	none		N/A	N/A	N/A	N/A	N/A	N/A	NJA	N/A	N/A	N/A
Siltronic Corp TCE Investigation	183	65W	7200 NW Fron	Dana Bayuk	VCP Order (2/04) & Joint NW Natural/Satronic Order (10/00)	Al	08/02/10	Groundwater:	Completed	N/A. Sittronic moving forward with source control, SCM Evaluation (FFS) submitted 10/07	N/A, Sitronic submitted SCM Evaluation	Pathway is complete	N/A, Sitronic submitted SCM Evaluation			SCM Evaluation (FFS) complete (12/07), DEQ review complete (2/08)	Enhanced in-still bioremediation (ESS) in source area of TCE release, hydrausic containment in coordination with NW Natural along shoreline	EPA comments communicated to Satironic 5/08	Final EIB work plan received (10/08), approved by DEQ (12/08), EIB performance monitoring well network established (2/09), EIB injections complete (7/09)		Groundwater monitoring within and downgradient of source area (i.e., former UST system) to assess EIB performance and effectiveness is ongoing.			Contingency meaures(hydraulic control/containment) may be implemented based on downgradient groundwater performance monatoring data and trends.
Siltronic Corp TCE Investigation	183	6.5 W	7200 NW Fron	Dana Bayuk	VCP Order (2/04) & Joint NW Natural/Sitronic Order (10/00)	Ri	08/02/10	Stormwater	Ongoing	Complete storm water and catch basin report per JSCS	4th Quarter 2010	Pathway is complete	to be determined	High	Waiting on SCE to be completed									
Sittronic Corp TCE Investigation	183	6.5 W	7200 NW Fron	Dana Bayuk	VCP Order (2/04) & Joint NW Natural/Siltronic Order (10/00)	RI	08/02/10	Overwater Activities	N/A	N/A	N/A	N/A	none		N/A	N/A	N/A	NIA	NA	N/A	N/A	N/A	N/A	N/A
Satronic Corp TCE Investigation	163	8.5 W	7200 NW From	Dana Bayuk	VCP Order (2/94) & John NW Natural/Stronic Orde (10/00)	RI	08/02/10	Other - Sediment contamination (Area 2) elisates of contlem lacely outself (Outself 001)	NA	N/A	NA	NUA			NA						Area 2 sediment contamination will be included in NN Natural/Sitronic in-was sediment action overseen by EPA. ACC for in-water work finalized 9/09			
Wilamette	2068	6.8 E	Foot of N	Ken	PH Agr for RVSCM	RI	07/06/10	Overland Transport/Sheet Flow	Completed	None	Wating on completion of	Waiting on SCE WP to be completed	plaw	pLow	Waiting on SCE to be completed				Removal of contaminated soil completed June	625 cubic yards				
Cove		6.8 E	Edgewater Foot of N	Thiessen	(11/00) PH Agr for RI/SCM	Ri	07/06/10		Ongoing	Additional sampling planned Fourth quarter 2010	riverbank work	TBO	p Low		Waiting on SCE to be completed	A SERVICE AND A			2008	-				
Wilamelle		6.5E	Foot of N	Ken Thiessen	(11/00) PH Agr for RI/SCM (11/00)	RI	07/06/10	Groundwater	Ongoing	Additional sampling planned Fourth quarter 2010	TBO	TBO	pLow		Waiting on SCE to be completed		1							
Cove		5.8 E	Edgewater Foot of N	Ken	PH Agr for RVSCM	Ri	07/06/10	Storriwater	N/A	No ste-related stormwater outfalls	NA NA	Insignificant pathway, n	o cone		NA	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Cove			Edgewater Foot of N	Ken	PH Agr for RVSCM	Ri	07/06/10	Overwater Activities	NA	N/A	N/A	No current source; like historic sources			N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	NA
Cows Phone Doube			Edgewater 6200 NW St	Thiessen	(11/00) Pre-PH Order for RI	100	08/21/10	Overland	N/A	N/A:	NIA	N/A	rone		N/A	N/A	NIA	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Rhone Poule	-	1	Helens 6200 NW St	Lacey	(1999) Pre-PH Order for R	100	08/21/10	Transport/Sheet Flow Bank Erosion	N/A	N/A	NIA	N/A	rone		N/A	N/A	N/A	N/A	N/A	NA	N/A	N/A	N/A	N/A
Rhone Poule		+	6200 NW S		Pre-PH Order for R	1272	06/21/10	Groundwater (plume discharge to river)	Ongoing	SCE Report and Alternatives Analysis	SCE Report in revision - 9/2010	Pathway is complete	pHigh		Wating on SCE to be completed									-
Rhone Poule			6200 NIN S	Dave Lacey	(1999) Pre-PH Order for R (1999)	RI	06/21/10	Groundwater (plume discharge to City Outles 228)		Phased dry weather flow investigation completed	Part of SCE 9/2010	Pathway is complete	p High	p High	Waiting on SCE to be completed	o interim measures implemented	stormwater in to prevent gw infiltration, effectiveness monitoring ongoing	•	Lining of entire 22 system in progress early measures no effective, expecte to be complete 3r quarter 2010	s, ot d				

		10 10 10 10 10 10 10 10 10 10 10 10 10 1	suspected	sources of	contamination to	the river		-		Source Cor	trol Evalu	uation (SCE))			Source	Control	Decisions	(SCDs) ar	nd Status o	f Source Co	atrol M	ASSIIFAS	(SCMe)
Site name	ECSI#	River mile	Address	DEQ PM	Type of agreement directing source control	Project status	Date last modified (m-d-y)	SCE Pathway	Status of SCE	Major SCE tasks to be completed	Schedule for completing SCE	Basis for determinati is no Pathway determination	on that sourceded Pathway priority level		Status of EPA review of SCE	Source control alternatives evaluation and schedule (m-y)		Status of EPA review of SCM selection decision	SCM activities completed to date	Mass or volume of contaminants controlled	Additional Proposed SCM activities to be done and schedule (m- y)	Date SCM completed (m-y)	Status of EPA	Operaton and maintenance requirements
Rhone Poulenc	155	7.0 W	6200 NW St Helens 6200 NW St	Dave Lacey Dave	Pre-PH Order for RI (1999) Pre-PH Order for RI	80	06/21/10	Stormwater	Ongoing	Complete SCE write up	Part of SCE 9/2010	Waiting on SCE to be completed	p Med		Waiting on SCE to be completed									NAME OF TAXABLE PARTY.
thone Poulent	155	7.0 W	Helens 6200 NW St	Lacey	(1999) Pre-PH Order for RI	Ri Ri	06/21/10	Overwater Activities Other - historical	N/A	N/A Complete remedial	N/A Part of SCE	N/A Waiting on SCE to be	none		N/A Waiting on SCE to	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
thone Poulenc	155	0.000	Helens 6200 NW St Helens	Dave Lacey	(1999) Pre-PH Order for RI (1999)	Ri	06/21/10	drainage ditch Other - current NPDES permitted discharge	Ongoing	Investigation Data collection for PH COI	9/2010 Part of SCE 9/2010	completed Waiting on SCE to be	pLow		be completed Waiting on SCE to be completed.									
McCormick & Baxter	74	7.0E	6900 N Edgewater Street	Scott Manzano	Superfund agreement with EPA	remedy implement ed	03/09/06	Overland Transport/Sheet Flow	Completed			Pathway is complete	High	1988	Complete			eigelen de	W	6,200 gallons of creosote recovered		SEL	EPA reviewed and	
McCormick & Baxter	74	7.0E	6900 N Edgewater Street	Scott Manzano	Superfund agreement with EPA	remedy implement ed	03/09/06	Bank Erosion	Completed			Pathway is complete	High		Complete	THE REAL PROPERTY.	contaminated soil removal,			from groundwater, 33,000 tons of contaminated sol and			EPA reviewed and	
McCormick & Baxter	74	7.0E	6900 N Edgewater Street	Scott Manzano	Superfund agreement with EPA	remedy implement ed	03/09/06	Groundwater	Completed			Pathway is complete	High	TO B	Complete		sheet-pile barrier wall, sediment cap, riparian soil		all SCMs have been implemented	debris removed, 23 acres of contaminated	(a) property	75	commented. EPA reviewed and	periodic inspection and maintenance, effectiveness monitoring,
McCormick & Baster	74	7.0E	6900 N Edgewater Street	Scott Manzano	Superfund agreement with EPA	remedy implement ed	03/09/06	Stormwater	Completed			Pathway is complete	High	High	Complete	Secretary of	cap, upland soll cap, creosole extraction			sediment capped, 6 acres of contaminated bank	01 S. 24		commented EPA reviewed and	site use restrictions
McCormick & Baxter	74	7.0E	6900 N Edgewater Street	Scott Manzano	Superfund agreement with EPA	remedy implement ed	03/09/06	Overwater Activities	Completed			Pathway is complete	High		Complete					soil capped, 35 acres of contaminated upland soil capped	100000		EPA reviewed and	
McCormick & Baxter	74	7.0E	6900 N Edgewater Street	Scott Marizano	Superfund agreement with EPA	remedy implement ed	03/09/06	Other	NA			N/A	none		N/A	N/A	N/A	N/A	NA	NA	N/A	N/A	commented.	NA
Arkema	398	7.2 W	6400 NW Fran	Matt McClincy	Pre-PH VCP Formal Agr for RVFS (9/95)	FS	08/03/10	Groundwater (Chlorobertzene/ODT Plume)	Completed		Completed April 07	Pathway is complete	High		EPA May 07 Completed	Draft focused feasibility study (ffs) for proposed hydraufic containment walksystem submitted May 88, Response to EPA/DEQ comments received Sept. 2008.	1,800 foot top of bank sturry wall, groundwater pump and treat system recommended.	Submitted for EPA review February 24, 2009	Interim SCMs Include AS/SVE system, initiated in- situ chem-ox Ireatment		Groundwater containment system in design scheduled to be operational Jan 2012			
Arkema	396	72W	6400 NW From	Mati McClincy	Pre-PH VCP Formal Agr for RVFS (9/98)	FS	08/03/10	Groundwater (Hestivalent Chromium Plume)	Completed		Completed April 07	Pathway is complete	High		EPA May 07 Completed	Draft focused feasibility study (ffs) for proposed hydraulic containment wall/system submitted May 08, Response to EPADEQ comments received Sept. 2008.	1,800 foot top of benk sturry well, groundwater pump and treat system recommended,	Submitted for EPA review February 24, 2009	interim SCMs include in-situ calcium polysulfide treatment		Groundwater containment system in design scheduled to be operational Jan 2012			
Arkema	398	72W	6400 NW Fron	Mutt McClincy	Pre-PH VCP Formal Agr for RVFS (9/98)	FS	08/03/10	Groundwater (Perchiocate Plume)	Completed		Completed April 07	Pathway is complete	High		EPA May 07 Completed	Draft focused feasibility study (fis) for proposed hydraulic containment wall/system submitted May 08, Response to EPA/DEQ comments received Sept. 2008.	1,800 fout top of bank slurry walt, groundwater pump and treat system recommended.	Submitted for EPA review February 24, 2009	Bench scale treatablity study completed April 2008		Groundwater containment system in design scheduled to be operational Jan 2012			
Arkema	398	7.2 W	6400 NW From	Matt McClincy	Pre-PH VCP Format Agr for RVFS (9/98)	FS	08/03/10	Groundwater Lots 1, 2 and northern portion of Lot 3	Ongoing	Rhone Poulenc SCE	4th Quarter 2010	Pathway is complete	p High								MARKE			
Arkema	398	7.2 W	5400 NW Fron	Matt McClincy	Pre-PH VCP Formal Agr for RVFS (9/98)	FS	08/03/10	Overland Transport/Sheet Flow	Ongoing	Part of Stormwater FFS	DEQ currently reviewing	Walling on SCE to be completed	to be determined	High	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	NA	NA
Arkema	398	72W	5400 NW Fron	Matt McClincy	Pre-PH VCP Formal Agr for RIFS (9/98)	FS	08/03/10	Bank Erosion	Completed			River Bank soil contaminant levels exceed action levels	High		Anticipate integrating with EPA in-water action	Review of riverbank remedial alternatives in progress	Tirning of SCM to be coordinated with EPA Early Action		None					
Arkema	398	72W (6400 NW Fron	Matt McClincy	Pre-PH VCP Formal Agr for RWFS (9/98)	FS	08/03/10	Stormwater	Completed			Contaminants in stormwater exceed screening values (AWQC)	High				DEQ Water Quality Mutal Agreement and Order signed for new stormwater collection and treatment system		Interim SCMs Include BMPs, surface soil removals and surface soil caps		Abandon existing system, update temporary caps to limit stormwater transport, construct new stormwater collection and treatment system by Jan 2012.			
Arkema	398	7.2 W	6400 NW Fron		Pre-PH VCP Formal Agr for RVFS (9/98)	FS	08/03/10	Overwater Activities	N/A	N/A	N/A	N/A	none		N/A	N/A	N/A	NA	N/A	N/A	N/A	N/A	N/A	N/A
Arkema	398	7.2W	6400 NW Fran	Mett McClincy	Pre-PH VCP Formal Agr for RIFS (9/98)	FS	08/03/10	Other	N/A	NA	N/A:	N/A	none		N/A	N/A	N/A	N/A	N/A	N/A	NA	N/A	NA	N/A
Air Liquide	395	7.2 W	6529 NW Front Ave.	Dave Lacey	Letter Agreement 1/09	хра	06/21/10	Overland Transport/Sheet Flow	N/A	N/A	N/A	N/A	none		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Air Liquide	395	7.2 W	6529 NW Front Ave	Dave Lacey	Letter Agreement 1/09	XPA	06/21/10	Bank Erosion	N/A	N/A	N/A	N/A	none		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Air Liquide	395	7.2 W	8529 NW Front Ave.	Dave Lacey	Letter Agreement 1/09	ХРА	06/21/10	Groundwater	Ongoing	тво	TBD	Waiting on SCE to be completed	to be determined	p Med	Waiting on SCE completion									

	Confirm	ned or s	suspected so	urces of	contamination to th					Source Conf	rol Evalu	ation (SCE)				Source	Control	Decisions	(SCDs) an	nd Status o	f Source Cor	ntrol M	easures	(SCMs)
	Site	inform	nation		Project	status						Basis for determinatio	n that source	control							Additonal Proposed		Status of EPA	
		River			Type of agreement	Project	Date last modified	SCE Pathway	Status of	Major SCE tasks to be	Schedule for	is nee	ded		Status of EPA review of SCE	Source control alternatives evaluation	Selected SCMs	Status of EPA review of SCM	SCM activities completed to date	Mass or volume of contaminants	SCM activities to be done and schedule (m-	Date SCM completed	review of completed	Operaton and maintenance
Site name	ECSI#	mile	Address	DEQ PM	directing source control	status	(m-d-y)	SCE Pathway	SCE	completed	completing SCE	Pathway determination	Pathway priority level	Site priority level	decision	and schedule (m-y)		selection decision	(m-y)	controlled	y)	(m-y)	SCM	requirements
Air Liquide	395	72W	6529 NW Front Ave.	Dave Lacey	Letter Agreement 1/09	ХРА	06/21/10	Stormwater	Ongoing	Stormwater Assessment	4th Qtr 2010	Waiting on SCE to be completed	p Med	1010	Waiting on SCE completion									
Air Liquide	395	7.2 W	8529 NW Front Ave.	Dave Lacey	Letter Agreement 1/09	XPA	06/21/10	Overwater Activities	N/A	N/A	N/A	N/A	none		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Air Liquide	3342	7.2 W	6529 NW Front Ave.	Dave	Letter Agreement 1/09	XPA	06/21/10	Other	N/A	N/A	N/A	N/A	enon		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Metro Central Transfer Station	1398	7.2 W	6161 NW 61 Ave	Dave Lacey	Letter Agreement 1/10	XPA	06/21/10	Groundwater	Ongoing	TBD	TBD	Waiting on SCE to be completed	to be determined		Waiting on SCE completion									
Metro Central Transfer Station	1398	72W	6161 NW 61 Ave	Dave Lacey	Letter Agreement 1/10	XPA	06/21/10	Stormwater	Ongoing	Stormwater Assessment	4th Otr 2010	Waiting on SCE to be completed	p Med	p Med	Waiting on SCE completion									
Metro Central Transfer Station	1398	7.2 W	6161 NW61 Ave	Dave Lacey	Letter Agreement 1/10	XPA	06/21/10	Overwater Activities	N/A	N/A	N/A	N/A	none		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Metro Central Transfer Station	1398	7.2 W	6161 NW 61 Aye	Dave Lacey	Letter Agreement 1/10	XPA	06/21/10	Other	N/A	NA	N/A	N/A	none		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Schnitzer Investment Doane Lake	395	7.2 W	6529 NW Front Ave.	Dave Lacey	Agreement negotiations ongoing	XPA	06/21/10	Overland Transport/Sheet Flow	Not Started	TBD	No current schedule.	N/A	to be determined		ТВО	TBD	TBD	TBO	ТВО	TBO	TBD	TBD	TBO	TBD
Schnitzer Investment Doane Lake	395	7.2 W	6529 NW Front Ave.	Dave Lacey	Agreement negotiations ongoing	XPA	06/21/10	Bank Erosion	N/A	N/A	N/A	N/A	N/A		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Schnitzer Investment Doane Lake	395	72W	6529 NW Front Ave.	Dave Lacey	Agreement negotiations ongoing	XPA	06/21/10	Groundwater	Not Started	TBO	No current schedule.	TBD	p Med	p Med	TBO	TBD	TBD	TBD	TBO	TBO	TBO	TBD	TBO	TBD
Schnitzer Investment Doane Lake	395	7.2 W	6529 NW Front Ave.	Dave Lacey	Agreement negotiations ongoing	хра	06/21/10	Stormwater	Not Started	TBO	No current schedule.	TBO	p Med		TBO	тео	TBD	TBO	ТВО	TBD	тво	TBO	TBD	ТВО
Schnitzer Investment Doane Lake	395	72W	6529 NW Front Ave.	Dave Lacey	Agreement negotiations origoing	ХРА	06/21/10	Overwater Activities	N/A	N/A	N/A	N/A	N/A		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A TBD
Schnitzer Investment Doane Lake	395	7.2 W	6529 NW Front Ave.	Dave Lacey	Agreement negotiations ongoing	XIPA	06/21/10	Other	Not Started	TBO	No current schedule.	TBO	to be determined		TBO	TBD	TBD	TBO	TBD	TBD	TBD	TBD	TBD	180
GS Roofing	117	7.5 W	6350 NW Front	Ken Thiessen	VCP - PH Agr	RII	07/06/10	Overland Transport/Sheet Flow	Ongoing	Finish characterization by First Quarter 2011	TBD	TBD	p Low		Waiting on SCE to be completed.									
GS Roofing	117	7.5 W	6350 NW Front	Ken Thiessen	VCP - PH Agr	RI	07/06/10	Bank Erosion	Ongoing	Finish characterization by First Quarter 2011	TBD	TBD	pLow		Waiting on SCE to be completed.							-		
GS Roofing	117	7.5 W	6350 NW Front	Ken Thiessen	VCP - PH Agr	RI	07/06/10	Groundwater	Ongoing	Finish characterization by First Quarter 2011	TBD	TBD	p Low		Waiting on SCE to be completed.						-	-	-	
GS Roofing	117	7.5 W	6350 NW Front	Ken Thiessen	VCP - PH Agr	RI	07/06/10	Stormwater	Ongoing	Follow up stormwater system characterization by First Quarter 2011	TBD	Complete	p Wed	p Med	Waiting on SCE to be completed.						N/A	N/A	N/A	N/A
GS Roofing	117	7.5 W	6350 NW Front	Ken Thiessen	VCP - PH Agr	RI	07/06/10	Overwater Activities	N/A	N/A	N/A	N/A	none		N/A	N/A	N/A	N/A	N/A	N/A	N/A N/A	N/A	N/A	N/A
GS Roofing	117	7.5 W	6350 NW Front	Ken Thiessen	VCP - PH Agr	RI	07/06/10	Other	N/A	N/A	N/A	N/A	none	-	N/A EPA reviewed &	N/A	N/A	N/A	N/A	N/A	TOA .	IVA	16/5	.4.7
Triangle Park (N PDX Yard)	277	7.5 E	5828 N Van Houten	Mark Ader EPA	Federal PPA 2006	EE/CA	08/02/10	Overland Transport/Sheet Flow	Completed				based on DEQ 2004		commented on DEQ's 2004 SCD	EPA EE/CA planned fo 4th Quarter 2010	e .							
Triangle Park	977	7.5 E	5828 N Van	Mark Ader	Federal PPA 2006	EE/CA	08/02/10	Bank Erosion	Completed				Medium based on		EPA reviewed & commented on	EPA EE/CA planned fo 4th Quarter 2010	or							
(N PDX Yard) Triangle Park (N PDX Yard)	277	700000	5828 N Van Houten	Mark Ader	Federal PPA 2008	EE/CA		Groundwater	Completed				TBD based on DEQ 2004		EPA reviewed & commented on DEQ's 2004 SCD	EPA EE/CA planned fo 4th Quarter 2010	or							
0,000																								
Triangle Park (N PDX Yard		7.5 E	5828 N Van Houten	Mark Ader EPA	Federal PPA 2006	EE/CA	08/02/10	Stormwater	Completed				Medium based on DEQ 2004	median	EPA reviewed & commented on DEQ's 2004 SCD	EPA EE/CA planned fo 4th Quarter 2010	or -							
Triangle Pari		7.5 E	5828 N Van Houten	Mark Adel	Federal PPA 2006	EE/CA	08/02/10	Overwater Activities	Completed				none		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Triangle Pari	k 277	75E	5028 N V/nn		Federal PPA 2006	EE/CA	08/02/10	Other - Petroleum pipeline enters at south end of site from beneath the river					Low based on DEQ 2004	d	EPA reviewed & commented on DEQ's 2004 SCD		or							
Gould Electronics, Ir aka GA-TEX		7.5W	5909 NW 61st Ave	EPA lead Chip Humphre	EPA Consent Decree		03/15/06	Overland Transport/Sheet Flow	NA	N/A	NA	N/A	none		N/A	N/A	N/A	N/A	N/A	NA	NIA	N/A	N/A	N/A

			suspected s	sources of	contamination to t	he river t status		-		Source Cor	ntrol Evalu	uation (SCE)				Source	Control	Decisions	(SCDs) ar	nd Status o	of Source Co	ntrol M	leasures	s (SCMs)
Site name	ECS14	River	Address	DEQ PM	Type of agreement	Project	Date last		Status of	Major SCE tasks to be	Schedule for	Basis for determinati		ce control	Status of EPA	Source control		Status of EPA	SCM activities	Mass or volume of	Additional Proposed	Date SCM	Status of EPA	
One mane	Loon	mile	Address	DEWPIN	directing source control	status	modified (m-d-y)	SCE Pathway	SCE	completed	completing SCE	Pathway determination	Pathway priority level	Site priority level	review of SCE decision	alternatives evaluation and schedule (m-y)	Selected SCMs	review of SCM selection decision	completed to date	contaminants controlled	SCM activities to be done and schedule (m- y)	completed	review of completed SCM	maintenance requirements
Gould Electronics, Inc aka GA-TEK	c 49	7.5W	5909 NW 61s Ave	EPA lead; Chip Humphrey	EPA Consent Decree		03/15/06	Bank Erosion	N/A	NA	N/A	N/A	none		NIA	N/A	N/A	N/A	N/A	N/A	N/A	N/A	NA	N/A
Gould Electronics, Inc aka GA-TEK	c 49	7.5W	5909 NW 61s Ave	EPA lead; Chip Humphrey	EPA Consent Decree		03/15/06	Groundwater	Completed			Insignificant pathway, no actions recommended	Low		EPA issued groundwater NFA based upon risk assessment		No SCM needed						EPA lead	
Gould Electronics, Inc aka GA-TEK	c 49	7.5W	5909 NW 61s Ave	EPA lead; Chip Humphrey	EPA Consent Decree		03/15/08	Groundwater/ City Storm Sewer	Completed			Pathway has been eliminated	none	Low	EPA lead									
Gould lectronics, Inc aka GA-TEK	c 49	7.5W	5909 NW 61sl Ave	EPA lead; Chip Humphrey	EPA Consent Decree		03/15/06	Stormwater	Completed			Historically pathway existed. Current discharge insignificant pathway, no actions recommended	Low	Low	EPA lead		1) Contaminated soil removal and containment (landfill); 2) Sediment removal; 3) RCRA waste containment; 4) Removed waste pond 5) O&M ongoing						EPA lead	
Gould lectronics, Inc aka GA-TEK	49	7.5W	5909 NW 61st Ave	EPA lead, Chip Humphrey	EPA Consent Decree		03/15/06	Overwater Activities	N/A	N/A	N/A	NIA	none		N/A	NA	N/A	N/A	N/A	N/A	N/A	N/A	N/A	NIA
Gould lectronics, Inc aka GA-TEK Willbridge	49	7.5W	5909 NW 61st Ave	EPA lead, Chip Humphrey	EPA Consent Decree		03/15/06	Other - Historic and Current NPDES permit	Completed			Historically pathway existed. Current discharge insignificant pathway, no actions recommended.	Low		EPA lead		Removed waste pond (East Doane Lake); O&M ongoing						EPA lead	
(Kinder Morgan, Chevron, Conoco Philips) Willbridge	1549	7.7 W	Front Ave & NW Doane	Mike Romero	Pre-PH Consent Order (3/94)	RVFS	05/30/10	Overland Transport/Sheet Flow	Completed			Insignificant pathway, no actions recommended			Submitted to EPA fall 2004; no comments		No SCM needed						N/A	
(Kinder Morgan, Chevron, Conocs Phillips)	1549	7,7 W	Front Ave & NW Doane	Mike Romero	Pre-PH Consent Order (3/94)	RIFS	06/30/10	Bank Erosion	Completed	Erodable Soils sampling conducted	Spring 2010	Insignificant pathway, no actions recommended	Low		Submitted to EPA fall 2004; no comments.								NA	
Willbridge (Kinder Morgan, Chevron, Conoco Phillips)	1549	7.7 W	Front Ave & NW Doane	Mae Romero	Pre-PH Consent Order (3/94)	RIFS	06/30/10	Groundwater	Ongoing	Chevron and Conoco conducting one GW SCE, Kinder Morgan conducting individual SCE	2nd qtr 2011 for Kinder Morgan, 4th qtr 2010 for Chevron/Conoco	GW suspected migration pathway	High		1st SCE submitted to EPA fail 2004; no comments. Waiting for revised GW SCE that includes deep groundwater and new site info to be completed			Proposed SCM submitted to EPA fall 2004; no comments			containment system installed 2005,			Effectiveness monitoring and operation and maintenance on going
Willbridge (Kinder Morgen, Chevron, Conoco Phillips)	1549	7.7 W	Front Ave & NW Doane		Pre-PH Consent Order (3/94)	RVFS	05/30/10	Stormwater	Ongoing	Stormwoter characterization started fall 07', Chevron SCE complete	4th Quarter 2010	Wailing on SCE to be completed at KinderMorgian and Concoo, Chievron SCE under review	to be determined	High	Waiting on SCE to be completed at 3 facilities.		Leaking stormwater covenanyce system repaired to stop GW inflaration at Conoco and KM (Saltzman creek)		OF-22 repaired 8/09, Conoco and Ceheron ste specific repairs, KM- Saltzman creek repairs		Repair stormwater system begun 11/07			
Willbridge (Kinder Morgan, Chevron, Conoco Philips)	1549	7.7 W	Front Ave & NW Doane	Mike Romero	Pre-PH Consent Order (3/94)	RVFS	06/30/10	Overwater Activities	N/A	NA	NA	No known current sources (spills reported to OERS)	none		NA	N/A	N/A	N/A	N/A	NIA	N/A	N/A	N/A	N/A
Willbridge (Kinder Morgan, Chewon, Conoco Philips)	1549	7.7 W	Front Ave & NW Doane	Mike Romero	Pre-PH Consent Order (3/94)	RUFS	06/30/10	Other	N/A	N/A	NA	N/A	none		N/A	N/A	N/A	N/A	N/A	N/A	NA	N/A	N/A	N/A
McCall Oil			5550 NW Front		PH Agr for RI/CSM (3/00)	RI	07/01/10	Overland Transport/Sheet Flow	Ongoing	Part of stormwater characterization	1st Qtr 2011	Waiting on SCE to be completed	pLow		Waiting on SCE to be completed.	NA NA	NA.	NA NA	NA NA	NA .	NA NA	NA	NA .	NA NA
McCall Oil	134	7.8 W 5	5550 NW Front	Jim Orr	PH Agr for RVCSM (3/00)	RI	07/01/10	Bank Erosion	Ongoing	Additional riverbank sampling	1st Qtr 2011	Waiting on SCE to be completed	p Low		Waiting on SCE to be completed.	NA NA	NA				NA NA	NA:	NA .	NA.
McCall Oil			5550 NW Front		PH Agr for RI/CSM (3/00)	RI	07/01/10	Groundwater	Ongoing	Additional groundwater data needed	1st Qtr 2011	Waiting on SCE to be completed	p Med	p Med	Walting on SCE to be completed.	NA .	NA				NA	NA	NA	NA
McCall Oil	134	7.8 W 5	5550 NW Front	Jim Orr	PH Agr for RI/CSM (3/00)	RI	07/01/10	Stormwater	Ongoing	Stormwater characterization and evaluation	1st Qtr 2011	Waiting on SCE to be completed	p Med		Waiting on SCE to be completed.	NA .	NA.				NA NA	NA	NA	NA NA

				urces of c	contamination to th		_			Source Con	trol Evalu	ation (SCE)				Source	Control	Decisions	(SCDs) an	d Status o	f Source Cor	ntrol M	leasures	(SCMs)
		inforn	nation		Project Type of agreement		Date last		Status of	Major SCE tasks to be	Schedule for	Basis for determination is nee		control	Status of EPA	Source control alternatives evaluation	Salastad SCMe	Status of EPA review of SCM	SCM activities completed to date	Mass or volume of contaminants	Additional Proposed SCM activities to be	Date SCM completed	Status of EPA review of	Operaton and maintenance
Site name	ECSI#	River	Address	DEQ PM	directing source control	Project status	modified (m-d-y)	SCE Pathway	SCE	completed	completing SCE	Pathway determination	priority	Site priority level	review of SCE decision	and schedule (m-y)	Selected SCMS	selection decision	(m-y)	controlled	done and schedule (m- y)	(m-y)	SCM	requirements
McCall Oil	134	7.8 W	5550 NW Front	Jim Orr	PH Agr for RI/CSM (3/00)	RI	07/01/10	Overwater Activities	Ongoing	Pathway needs to be evaluated in SCE	1st Qtr 2011	Waiting on SCE to be completed	pLow		N/A	N/A	N/A	N/A	N/A N/A	N/A N/A	N/A N/A	N/A N/A	N/A N/A	N/A N/A
McCall Oil	134		5550 NW Front 5275 & 5315	Jim Ort	PH Agr for RVCSM (3/00)	RI	07/01/10	Other	N/A	N/A	N/A	N/A	none		N/A	N/A	N/A	N/A	THE RESERVE OF THE PARTY OF THE	N/A	N/A	N/A	N/A	N/A
Anderson Brothers Property	970	8W	NW St. Helens Rd.	Bob Schwarz	ICP	NFA	12/10/09	Overland Transport/Sheet Flow	Completed	None	N/A	N/A	none	Low	N/A	N/A	N/A	N/A	N/A					
Anderson Brothers Property	970		5275 & 5315 NW St. Helens Rd.	Bob Schwarz	ICP	NFA	12/10/09	Bank Erosion	Completed	None	N/A	N/A	none	984	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Anderson Brothers	970		5275 & 5315 NW St. Helens Rd.	Bob Schwarz	KCP	NFA	12/10/09	Groundwater	Completed	None	N/A	N/A	none		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Property Anderson Brothers	970		5275 & 5315 NW St Helens	Bob Schwarz	ICP	NFA	12/10/09	Stormwater	Completed	None	NA	Complete	Low	100	December 2009	NA NA	NA.	NA NA	NA	NA	NA NA	NA	NA	NA
Property Anderson Brothers	970		Rd. 5275 & 5315 NW St. Helens	Bob Schwarz	ICP.	NFA	12/10/09	Overwater Activities	Completed	None	NA	N/A	none		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Anderson Brothers Property	970	aw	Rd. 5275 & 5315 NW St. Helens Rd.	Bob Schwarz	ICP	NFA	12/10/09	Other	Completed	None	N/A	N/A	none		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Chevron Asphalt	1281	8.0 W	5501 NW Front	Mark Pugh	PH Letter Agr for SCE (6/06)	OAM	05/25/10	Overland Transport/Sheet Flow	N/A	N/A	N/A	N/A	none		N/A	N/A	NA	N/A	NA	N/A	N/A	N/A	N/A	N/A
Chevron Asphalt	1281	8.0 W	5501 NW Front	Mark Pugh	PH Letter Agr for SCE (6/06)	O&M	05/25/10	Bank Erosion	N/A	N/A	N/A	N/A	hone		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Chevron Asphalt	1281	8.0 W	5501 NW Front	Mark Pugh	PH Letter Agr for SCE (6/06)	NAO	05/25/10	Groundwater	Completed	N/A	N/A	Insignificant pathway, no actions recommended	Low	Low	EPA has reviewed and commented on SCD	No measures needed	N/A	N/A	N/A	N/A	N/A	N/A	N/A EPA has	N/A
Chevron Asphalt	1281	8.0 W	5501 NW Front	Mark Pugh	PH Letter Agr for SCE (6/06)	N80	05/25/10	Stormwater	Completed	NA	N/A	Pathway is complete	Low		EPA has reviewed and commented on SCD	Completed;	In-line sediment removal; enhanced BMPs	Completed and ongoing Source control measures	basin inserts,	catch basin and in- tine solids removed t	line segment completes		reviewed and commented on	BMPs as documented in revised SWPCP
Chevron Asphalt	1281	8.0 W	5501 NW Front	Mark Pugh	PH Letter Agr for SCE (6/05)	M&O	05/25/10	Overwater Activities	N/A	N/A	N/A	NA	none		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	NIA
Chevron Asphalt	1281	8.0 W	5501 NW Front	Mark Pugh	PH Letter Agr for SCE (6/06)	MãO	05/25/10	Other	N/A	NA	N/A	N/A	none		N/A	N/A	N/A	N/A	NA	N/A	N/A	N/A	N/A	N/A N/A
Willbridge Railyard	3395	8.0 W	Doane Ave.	Shawn Rapp	Letter Agr for XPA	XFA	07/27/10	Overland Transport/Sheet Flow	N/A	N/A	N/A	N/A	none		N/A.	N/A	N/A	N/A.	N/A N/A	N/A N/A	N/A N/A	N/A N/A	N/A N/A	N/A
Willbridge Railyard	3395	8.0 W	5814 NW Doane Ave.	Shawn Rapp	Letter Agr for XPA	XPA	07/27/10	Bank Erosion	N/A	N/A	N/A	N/A	noce		NA	N/A	N/A	N/A	NeA	N/A	0.5	100		
Willbridge Railyard	3395	8.0 W	5814 NW Doane Ave.	Shawn Rapp	Letter Agr for XPA	XPA	07/27/10	Groundwater	Ongoing	None	2nd Qtr 2011	No known current sources (spills will be reported to OERS)	p Line	pLow	Waiting on SCE completion	No measures needed	N/A							
Wilbridge Rallyard	3395	3.0 W	5814 NW Doane Ave.	Shawn Rapp	Letter Agr for XPA	хра	07/27/10	Stormwater	Ongoing	Working with neighboring site to determine pipe locations, flow, ownership and condition		Waiting on SCE to be completed	ptiw		Walting on SCE completion		Pending SCE completion. Str piping receiving contaminants from city streets			No.				
Wilbridge Railyard	3395	8.0 W	5814 NW Doane Ave.	Shawn Rapp	Letter Agr for XPA	XPA	07/27/10	Overwater Activities	N/A	NA	N/A	NA	BOSE		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Willbridge Railyard	3395	8.0W	KR14 NIW	Shawn Rapp	Letter Agr for XPA	XPA	07/27/10	Other	N/A	N/A	N/A	N/A	none		N/A	N/A	N/A:	NIA	N/A	N/A	N/A	N/A	N/A	N/A
Glacier Northwest Inc	2378	8.1 W	5034 NW Fron	Mike Romero				Overland Transport/Sheet Flow			-			- As				The same of			A PROPERTY			A STATE OF THE STA
Glacier Northwest Inc	2378	8.1 W	5034 NW Fron	Mike Romero		1		Bank Erosion	-		The state of			-										
Glacier Northwest Inc	2378	8.1 W	EGGA BUAL Errors		Part of Front Ave LP		-	Groundwater		White said												1		
Glacier Northwest inc Glacier	2070	5.1 W	27.75	Romero	ste, see ESCI#1239			Stormwater						100			-							
Glacier Northwest in	2378	8.1 W	5034 NW From Ave	Romero				Overwater Activities																
Glacier Northwest In	2378	6.1 W	5034 NW From Ave	Mike Romero				Other							eri zan	EN THE								The same
Front Ave Li	1239	8.2W	4950, 5034 & 5200 NW Fron	Mke Romero	VCP Letter Agr for PA (1/02)	RI	06/30/10	Overland Transport/Sheet Flow	N/A	N/A	N/A	NIA	none		NA	NA	NA NA	NA NA	NA NA	NA NA	N/A	N/A	N/A	N/A
Front Ave Li	1239	8.2 W	4950, 5034 & 5200 NW From	Mike Romero	VCP Letter Agr for P/ (1/02)	RI	06/30/10	Bank Erosion	Ongoing	Conducting XPA and SCE	4thQtr 2010	Wating on SCE to be completed	plow	100	Waiting on SCE to be completed.		-							
Front Ave Li	1239	5.2 W	4950, 5034 & 5200 NW From	Mana Romero	VCP Letter Agr for PA (1/02)	RI	06/30/10	Groundwater	Ongoing	Conducting XPA and SCE	4th Oir 2010	Waiting on SCE to be completed	plaw	pLow	Waiting on SCE to be completed.									
Front Ave Li	P 1239	8.2 W	4950, 5034 & 5200 NW From	Mike Romero	VCP Letter Agr for P/ (1/02)	Ri	06/30/10	Stormwater	Ongoing	Conducting XPA, additional sampling needed for SCE completion		Waiting on SCE to be completed	to be determined		Walting on SCE to be completed.	0			THE REAL PROPERTY.	100000				
			4950, 5034 & 5200 NW From	- The same of		A RI	06/30/10	Overwater Activities	NA	N/A	N/A	No known current sources (spits reporte to OERS)	d none	1-16	N/A	NA	N/A	NIA	NA	N/A	N/A	N/A	NVA	N/A

(ources of	contamination to t	301107 2011 277				Source Cor	trol Eval	uation (SCE)				Causa	0	D	/20D \	1011				Teach to the second
	Site	inform	mation		Projec	t status	T -			Jource Cor	THOI EVAI	Basis for determination	on that source	e contro		Source	Control	Decisions	(SCDs) ar	nd Status o	f Source Co	ntrol N	leasures	(SCMs)
Site name	ECSI#	River	Address	DEQ PM	Type of agreement directing source control	Project status	Date last modified (m-d-y)	SCE Pathway	Status of SCE	Major SCE tasks to be completed	Schedule for completing SCE		Pathway priority level	Site priority level	Status of EPA review of SCE	Source control alternatives evaluation and schedule (m-y)	Selected SCMs	Status of EPA review of SCM selection decision	SCM activities completed to date (m-y)	Mass or volume of contaminants controlled	Additional Proposed SCM activities to be done and schedule (m- y)	Date SCM completed (m-y)	Status of EPA review of completed SCM	Operaton and maintenance requirements
Front Ave LP	1239	82W	4950, 5034 & 5200 NW Front	Mike Romero	VCP Letter Agr for PA (1/02)	RI	06/30/10	Other	N/A	N/A.	N/A	N/A	none	lever	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	NA
US Navy Reserve	5109	8.2 W	6735 North Basin Avenue	Jim Orr	Agreement Not Established	RVSCE	07/29/10	Overland Transport/Sheet Flow	Not Started	Not Started	Unknown Wating for Navy Funding	Unknown	p Med	No.	Waiting on SCE to be completed.		Res							142
US Navy Reserve	5109	8.2 W	6735 Norh Basin Avenue	Jim On	Agreement Not Established	RVSCE	07/29/10	Bank Erosion	Not Started	Not Started	Unknown Waiting for Navy Funding	Unknown	p Med		Waiting on SCE to be completed.									
US Navy Reserve	5109	8.2 E	6735 Norh Basin Avenue	Jim Orr	Agreement Not Established	RVSCE	07/29/10	Groundwater	Not Started	Not Started	Unknown Walting for Navy Funding	Unknown	p Med	p Med	Waiting on SCE to be completed.									
US Navy Reserve	5109	82E	6735 Norh Basin Avenue	Jim Orr	Agreement Not Established	RVSCE	07/29/10	Stormwater	Not Started	Not Started	Unknown Waiting for Navy Funding	Unknown	p Med		Waiting on SCE to be completed.					Alson,				
US Navy Reserve	5109	82E	8735 North Basin Avenue	Jim Orr	Agreement Not Established	RVSCE	07/29/10	Overwater Activities	Not Started	Not Started	Unknown Waiting for Navy Funding	Unknown	p Med		Waiting on SCE to be completed.			-						
US Navy Reserve	5109	8.2 E	6735 Norh Basin Avenue	Jim Orr	Agreement Not Established	RISCE	07/29/10	Other	Not Started	Not Started	Unknown Waiting for Navy Funding	Unknown	p Med		Waiting on SCE to be completed.									The state of the s
USCG	1338	8.2 E	6767 N Basin Ave.	Shawn Rapp	VCP Letter Agr (2/04)	RI	07/01/10	Overland Transport/Sheet Flow	Origoing		4th Quarter 2010	Insignificant pathway, no actions recommended	p Low		Waiting on SCE to be completed.									
USCG	1338	8.2 E	6767 N Basin Ave.	Shawn Rapp	VCP Letter Agr (2/04)	RI	07/01/10	Bank Erosion	Ongoing		4th Quarter 2010	Insignificant pathway, no actions recommended	pLow		Walting on SCE to be completed.									
USCG	1338	8.2 E	6767 N Basin Ave.	Shawn Rapp	VCP Letter Agr (2/04)	RI	07/01/10	Groundwater	Ongoing		4th Quarter 2010	Insignificant pathway, no actions recommended	p Low		Waiting on SCE to be completed.									
USCG	1338	8.2 E	6767 N Basin Ave.	Shawn Rapp	VCP Letter Agr (2/04)	RI	07/01/10	Stormwater	Ongoing	Sampling stormwater system	4th Quarter 2010	Waiting on SCE to be completed	p Med	p Med	Waiting on SCE to be completed.									
USCG	1338	8.2 E	6767 N Basin Ave.	Shawn Rapp	VCP Letter Agr (2/04)	RI	07/01/10	Overwater Activities	Ongoing		4th Quarter 2010	No known current sources (spills will be reported to OERS)	Low		Waiting on SCE to be completed.									
USCG	1338	8.2 E	6767 N Basin Ave.	Shawn Rapp	VCP Letter Agr (2/04)	RI	07/01/10	Other	N/A	N/A	N/A	N/A	none		N/A	N/A	N/A	N/A	N/A	N/A	NA	N/A	N/A	N/A
Kittridge	2442	8.3 W 4	1959 NW Front	Matt McClincy	PH Letter Agr for XPA (9/00)	NFA	03/13/06	Overland Transport/Sheet Flow	Completed			Insignificant pathway, no actions recommended	Low		EPA reviewed and commented 8/2002		No SCM needed					No.		
Kittridge	2442	8.3 W 4	4959 NW Front	Matt McClincy	PH Letter Agr for XPA (9/00)	NFA	03/13/06	Bank Erosion	N/A			N/A	none	15/10	EPA reviewed and commented 8/2002		No SCM needed					MIL		
Kittridge	2442	8.3 W 4	4959 NW Front	Matt McClincy	PH Letter Agr for XPA (9/00)	NFA	03/13/06	Groundwater	Completed	NO TO		Insignificant pathway, no actions recommended	Low	Low	EPA reviewed and commented 8/2002		No SCM needed				A STATE OF THE STA			
Kittridge	2442	8.3 W 4	1959 NW Front	Matt McClincy	PH Letter Agr for XPA (9/00)	NFA	03/13/06	Stormwater	Completed			Insignificant pathway	Low	an Elli	EPA reviewed and commented 8/2002		No SCM needed			Line in			1900	
Kittridge	2442	8.3 W 4	1959 NW Front	Matt McClincy	PH Letter Agr for XPA (9/00)	NFA	03/13/06	Overwater Activities	N/A	N/A	N/A	N/A	none		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Kittridge	2442	8.3 W 4	1959 NW Front	Matt McClincy	PH Letter Agr for XPA (9/00)	NFA	03/13/06	Other	N/A	N/A	NA	N/A	none		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Fred Devine	2365	8.3 E 6	6211 N Ensign	Karen Tarnow	VCP Letter Agreement 11/06	XPA	07/27/10	Overland Transport/Sheet Flow	N/A	NA	N/A	No known current sources (spills will be reported to OERS)	none		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Fred Devine	2365	83E 6	5211 N Ensign	Karen Tarnow	VCP Letter Agreement 11/06	XPA	07/27/10	Bank Erosion	N/A	NA	No current schedule.	No known current sources (spills will be reported to OERS)	none		N/A	N/A	N/A	NA	NA	NA	NA	N/A	N/A	N/A
Fred Devine	2365	8,3 E 6	5211 N Ensign	Karen Tarnow	VCP Letter Agreement 11/06	XPA	07/27/10	Groundwater	N/A	NA	No current schedule.	No known current sources (spills will be reported to OERS)	none	pLow	NA	NA	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Fred Devine	2365	83E 6	5211 N Ensign	Karen Tamow	VCP Letter Agreement 11/08	XPA	07/27/10	Stomwater	Ongoing	Complete stormwater system characterization	Alh Qtr 2010	to be determined	pLow		Waiting on SCE to be completed.				BMPs such as catch basin insents, inspection and catch basin cleanout on periodic basis					
Fred Devine				Tarnow	VCP Letter Agreement 11/06	XPA	07/27/10	Overwater Activities	N/A	N/A	N/A	No known current sources (spills reported to OERS)	none		NIA	N/A	NA	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Freightliner Truck Plant	2385	CONTRACT OF	6936 N	Tarnow	VCP Letter Agreement 11/06 PH Agr for RVSCM (12/02)	XPA RI	07/27/10	Other Overland Transport/Sheet Flow	N/A N/A	N/A N/A	N/A N/A	N/A N/A	none		N/A N/A	N/A N/A	N/A N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

				ources of	contamination to the					Source Conf	trol Evalu	ation (SCE)				Source	Control	Decisions	(SCDs) an	d Status o	f Source Cor	trol M	easures	(SCMs)
Site name	ECSI#	River	Mation Address	DEQ PM	Type of agreement directing source control	Project status	Date last modified (m-d-y)	SCE Pathway	Status of SCE	Major SCE tasks to be completed	Schedule for completing SCE	Basis for determination is need Pathway determination	Pathway priority	Site priority	Status of EPA review of SCE decision	Source control alternatives evaluation and schedule (m-y)	Selected SCMs	Status of EPA review of SCM selection decision	SCM activities completed to date (m-y)	Mass or volume of contaminants controlled	Additional Proposed SCM activities to be done and schedule (m- y)	Date SCM completed (m-y)	Status of EPA review of completed SCM	Operaton and maintenance requirements
Freightliner		Total Control	6936 N	Mike	PH Agr for RVSCM	Ri	06/30/10	Bank Erosion	N/A	N/A	N/A	N/A	none	level	N/A	N/A	N/A	NA	N/A	NA	N/A	N/A	N/A	N/A
Freightliner Truck Plant Freightliner	2286	83E 83E	Fathorn 6936 N	Romero Mike	(12/02) PH Agr for RI/SCM	Ri	06/30/10	Groundwater	Ongoing	determine nature and extent	4th Qtr 2010	Waiting on SCE/RI report to be completed	pLow		Waiting on SCE/RI to be completed.	Name of Street	College State							
Truck Plant Freightliner Truck Plant		836	Fathom 6936 N Fathom	Mike Romero	(12/02) PH Agr for RVSCM (12/02)	RI	06/30/10	Stormwater	Ongoing	of VOC plume SW evaluation started 07	1st Qtr 2011	Wating on SCE to be completed	to be determined	plow	Waiting on SCE to be completed.		RP voluntarily applying SW engineering controls on Ensign Street Outfall, coating metal roof, system sediment cleanout 06-07 prior to completing screening							
Freightliner Truck Plant	2366	8.3 E	6936 N Fathorn	Mike Romera	PH Agr for RVSCM (12/02)	RI	06/30/10	Overwater Activities	N/A	N/A	NIA	N/A	none		N/A	N/A	N/A	NIA	N/A	N/A	N/A	N/A	N/A	N/A
Freightliner Truck Plant	2366	8.3 E	6936 N Fathom	Mke Romero	PH Agr for RI/SCM (12/02)	RI	06/30/10	Other	N/A	NA	NA	NA	none		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Lakeside	2372	8.4 W	4850 NW Fron	Jim Orr	PH Letter Agr for XPA	XPA	07/11/10	Overland Transport/Sheet Flow	N/A	NA	N/A	N/A	none	No.	N/A	N/A	NIA	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Lakeside			4850 NW From		(3/02) PH Letter Agr for XPA (3/02)	-	07/01/10	Bank Erosion	Ongoing	Prepare SCE report	To be determined	Insignificant pathway; no actions recommended	pLow		Waiting on SCE completion			100000		THE REAL	The state of the s	Hille	men	
Lakeside Industries	1000	200000			PH Letter Agr for XPA (3/0Z)	XPA	07/01/10	Groundwater	Ongoing	Prepare SCE report	To be determined	Wating on SCE to be	pLow		Waiting on SCE completion		UIC closures in 2003							
Lakeside	2372	8.630	4850 NW From	Jim Orr	PH Letter Agr for XPA (3/02)	XPA	07/01/10	Stormwater	Ongoing	Initiate stormwater evaluation	To be determined	Waiting on SCE to be	to be	p Low	Waiting on SCE		Interim SCM.					No. of the		
Lakeside Industries	1000000	-	4850 NW Fron		(3/02) PH Letter Agr for XPA (3/02)		07/01/10	Overwater Activities	N/A	N/A	N/A	No known current sources (spills reported	determined	7.00	completion N/A	N/A	N/A	N/A	N/A	NA	N/A	N/A	N/A	N/A
Lakeside Industries	2372	8.4 W	4850 NW From	Jim Orr	PH Letter Agr for XPA (3/02)	XPA	07/01/10	Other	N/A	NA	N/A	N/A	nose		NA	NA	N/A	N/A	N/A	N/A	N/A	N/A	NIA	N/A
Shaver ransportation	2377	8.4 W	4900 NW From	Mark Pugh	PH Letter Agr for XPA (3/01)	NFA	03/03/06	Overland Transport/Sheet Flow	Completed		4875	Insignificant pathway, n actions recommended			EPA reviewed and commented, 8/200	2	No SCM needer	1						Carlo Santa
Shaver	2377	8.4 W	4900 NW Fron	Mark Pugh	PH Letter Agr for XPA (3/01)	NFA	03/03/06	Bank Erosion	Completed			Insignificant pathway, n actions recommended		975	EPA reviewed and commented, 8/200		No SCM needer	d					1000	
Shaver	2377	8.4 W	4900 NW From	Mark Pugh	PH Letter Agr for XPA (3/01)	NFA	03/03/06	Groundwaler	Completed		I STEEL	Insignificant pathway; nactions recommended		Low	EPA reviewed and commented, 8/200	2	No SCM neede	d					The state of	Silo III
Shaver Transportation	2377	8.4 W	4900 NW From	t Mark Pugh	PH Letter Agr for XPA (3/01)	NFA	03/03/08	Stormwater	Completed			Insignificant pathway, nactions recommended			EPA reviewed and commented, 8/200		No SCM neede	d						S vizioni i
Shaver	2377	8.4 W	4900 NW From	Mark Pugh	DLI I alloy Agy for VDA	NFA	03/03/06	Overwater Activities	Completed			Insignificant pathway, re actions recommended		100	EPA reviewed and commented, 8/200	2	No SCM neede	d		Contract of	The state of			
Shaver ransportation	2377	8.4 W	4900 NW From	t Mark Pugh	PH Letter Agr for XPA (3/01)	NFA	03/03/06	Other	N/A	N/A	N/A	N/A	none		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Portland hipyard (Vigo Industrial Portland)		8.4 E	Swan Island	Dave Lace	Valuation Accessment		6/21/2010	Overland Transport/Sheet Flow	To be evaluated by Port of Portland.	N/A	N/A	N/A	N/A		N/A									
Portland Shipyard (Vigo Industrial Portland)	271	8.4 E	Swan Island	Dave Lace	Voluntary Agreement (6/05)	XPA	6/21/2010	Bank Erosion	To be evaluated by Port of Portland.	N/A	N/A	N/A	N/A		N/A									
Portland Shipyard (Vig- Industrial Portland)	271	8.4 E	Swan Island	Dave Lace	Voluntary Agreement (6/08)	XPA	6/21/2010	Groundwater	To be evaluated by Port of Portland.	N/A	N/A	N/A	N/A		N/A									
Portland Shipyard (Vigi Industrial Portland)	271	8.4 E	Swan Island	Dave Lace	Voluntary Agreement (6/06)	XPA	6/21/2010	Stormwater	Ongoing	Draft SCE in review	4th Otr 2010	Complete	p Med	p Med	Waiting on SCE to be completed.	2								
Portland Shipyard (Vig- Industrial Portland)	or 271	8.4 E	Swan Island	Dave Lace	Voluntary Agreement (6/06)	XPA	6/21/2010	Overwater Activities	Ongoing	Draft SCE Submitted 4/10 in review	4th Otr 2010	Wating on SCE to be completed	p Med		Waiting on SCE to be completed.									
Portland shipyard (Vig Industrial Portland)	or 271	8.4 E	Swan Island	Dave Lace	Voluntary Agreement (6/06)	XPA	6/21/2010	Other	N/A	N/A	N/A	N/A	NA		N/A									

			r suspected s	ources of	contamination to t	he river t status				Source Cor	ntrol Eval	uation (SCE)				Source	e Control	Decisions	s (SCDs) ar	nd Status o	of Source Co	ntrol N	leasures	(SCMs)
Site name	ECSI	# River	Address	DEQ PM	Type of agreement directing source control	Project status	Date last modified (m-d-y)	SCE Pathway	Status of SCE	Major SCE tasks to be completed	Schedule for completing SCE		Pathway	Site	Status of EPA review of SCE	Source control alternatives evaluation	Lacor Day Moneyo	Status of EPA review of SCM	SCM activities completed to date	Mass or volume of contaminants	Additonal Proposed SCM activities to be done and schedule (m-	Date SCM	Status of EPA review of	Operaton and maintenance
Portland hipyard (Port	271	8.4 E	Swan Island	Dave	Voluntary Agreement	RI	12/21/09	Overland	Ongoing	OU-1 SCE in prepartaion, OU 2 SCE draft submitted 4/10,	4th Qtr 2010	determination Waiting on SCE to be	priority	priority level	decision Waiting on SCE to	and schedule (m-y)		selection decision	(m-y)	controlled	y)	(m-y)	scmpleted SCM	requirements
Portland Portland ipyard (Port	271	8.4 E		Lacey	(6/06) Voluntary Agreement	RI	12/21/09	Transport/Sheet Flow Bank Erosion	10490041	OU-3 SCE draft submitted 4/10 OU-1 SCE in prepartaion, OU 2 SCE draft submitted 4/10,		completed Waiting on SCE to be	p Med		be completed Waiting on SCE to									
Portland Portland appard (Port		8.4 E		Lacey	(6/06) Voluntary Agreement	Ri	1	100000000000000000000000000000000000000	Ongoing	OU-3 SCE draft submitted 4/10 OU-1 SCE in prepartaion, OU 2 SCE draft submitted 4/10.	M-100 TO 5	completed Wating on SCE to be	p Med	p Med	be complete									
Portland Portland ipyard (Port	271	1 02.51/5	Carlo Solat St	Lacey	(6/06) Voluntary Agreement	RI	12/21/09	Groundwater Stormwater	Ongoing	OU-3 SCE draft submitted 4/10 OU-2 SCE draft submitted 4/10, OU-3 SCE draft	4th Qtr 2010 4th Qtr 2010	completed Waiting on SCE to be	p Med		Waiting on SCE to be completed Waiting on SCE to									
Portland) Portland ipyard (Port Portland)	271	8.4 E	Swan Island	Dave Lacey	(6/06) Voluntary Agreement (6/06)	RI	12/21/09	Overwater Activities	Ongoing	submitted on 4/10	N/A	completed N/A	p Med N/A		be completd N/A									
Mi Hood Chemicals	81	8.5 W	4444 NW Year	Jim Orr	Agreement for Stormwater Assessment & Source Control	RVSCE	07/29/10	Overland Transport/Sheet Flow	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	NA	N/A	N/A	N/A	N/A	N/A	N/A
Mt Hood Chemicals	81	8.5W	4444 NW Year	Jim Orr	Agreement for Stormwater Assessment & Source	RVSCE	07/29/10	Bank Erosion	N/A	N/A	N/A	N/A	N/A	N/A	N/A	NIA	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Mt Hood Chemicals	81	8.5W	4444 NW Yean	Jim Orr	Agreement for Stormwater Assessment & Source Control	RVSCE	07/29/10	Groundwater	Ongoing	Compliance Monitoring of groundwater and sub slab vapors. Treatment of groundwater by Hydrogen Release Compound and Vapor extraction.	4th Otr 2011	Walling on SCE to be completed	pLow	pLow	Wailing on SCE to be completed		Operating insitu groundwater VOC treatment HRC and vapor extraction		Operating insitu groundwater VOC treatment HRC and vapor extraction system December		SCM Complete	December 2010	Schedule for completing final evaluation report:	periodic inspection and maintenance
Mt Hood Chemicals	81	8.5W	4444 NW Yeon	Jim Orr	Agreement for Stormwater Assessment & Source Control	RVSCE	07/29/10	Stormwater	Ongoing	SCE Work Plan and implementation	4th Qtr 2011	Waiting on SCE to be completed	pLow	pLow	Waiting on SCE to be completed		system		2010				December 2010	
Mt Hood Thernicals	81	8.5W	4444 NW Yeon	Jim Orr	Agreement for Stormwater Assessment & Source Control	RVSCE	07/29/10	Overwater Activities	N/A	N/A	N/A.	N/A	N/A	N/A	N/A	N/A	NA	N/A	N/A	N/A	N/A	N/A	N/A	NVA
Mt Hood hemicals	81	8.5W	4444 NW Yeon	Jim Orr	Agreement for Stormwater Assessment & Source Control	RVSCE	07/29/10	Other	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
GE Forest Park	2406	8.5 W	oreer	Karen Tamow	1999 ICP Agreement	NFA	07/27/10	Overland Transport/Sheet Flow	Completed	N/A	NA	N/A	none	-	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
GE Forest Park	2406	8.5 W	4400 Block Street	Karen Tamow	1999 ICP Agreement	NFA	07/27/10	Bank Erosion	Completed	NIA	N/A	N/A	none		N/A	N/A	NA	N/A	NIA	N/A	N/A	N/A	N/A	N/A
GE Forest Park	2406	8.5 W	4400 Block Street	Karen Tamow	1999 ICP Agreement	NFA	07/27/10	Groundwater	Completed	NA	N/A	N/A	none	100	NA	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
GE Forest Park		8.5 W	Street	Karen Tarnow	PPA	SCE	07/27/10	Stormwater	Ongoing	None		Complete	Low	Low	SCD document needs to be prepared by DEQ schedule TBD		PPA with City of Portland requires ongoing erosion control pending site development							
GE Forest Park	2406	8.5 W	4400 Block Street	Karen Tarnow	1999 ICP Agreement	N/A	07/27/10	Overwater Activities	N/A	N/A	N/A	N/A	none	MAG	N/A	NVA	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
GE Forest Park	2406	8.5 W	4400 Block Street	Karen Tarnow	1999 IOP Agreement	N/A	07/27/10	Other	N/A	N/A	N/A	N/A	none		N/A	N/A	NA	N/A	N/A	N/A	N/A	N/A	N/A	N/A
bag Metals	2454	8.5 W	4927 NW Front	Tom Gainer	PH Letter Agr for XPA (1/01)	XPA	03/06/06	Overland Transport/Sheet Flow	N/A	N/A	N/A	N/A	none		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
bag Metals	2454	8.5 W	4927 NW Front	Tom Gainer	PH Letter Agr for XPA (1/01)	XPA	03/06/06	Bank Erosion	N/A	N/A	N/A	NA	none		N/A	N/A	N/A	N/A	N/A	N/A	N/A	NA	N/A	N/A
bag Metals	2454	8.5 W	4927 NW Front	Tom Gainer	PH Letter Agr for XPA (1/01)	ХРА	03/06/06	Groundwater	N/A	N/A	N/A	NA	none		N/A	N/A	N/A	N/A	N/A:	N/A	N/A	N/A	N/A	N/A
bag Metals	2454	5.5 W	4927 NW Front	Tom Gainer	PH Letter Agr for XPA (1/01)	XPA	08/02/10	Stormwater	Completed			Paithway is complete	Medium	Medium	EPA reviewed and commented on prefirminary SCO, 6/2004	alternatives evaluation completed, submitted to EPA 9/2005	stornwater catch basin in-line cleanout, stornwater BMPs, monitoring	SCM SCD finalized 11/2005, EPA commented	stormwater catch basin in-line cleanout, stormwater BMPs, monitoring		New data resulted in DEQ reopening project and reviewing the adequacy of the 2005 source control action. Re-evaluate stormwater solids fall 2010		EPA reviewed and commented 11/2005	
bag Metals	2454	8.5 W	4927 NW Front	Ganer	PH Letter Agr for XPA (1/01)	XPA	03/06/06	Overwater Activities	N/A	N/A	N/A	NA	none		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Texaco			4927 NW Front	Ganer	PH Letter Agr for XPA (1/01)	XPA	03/06/06	Other	N/A	N/A	N/A	N/A	none		N/A	N/A	N/A	N/A	NA	N/A	N/A	N/A	N/A	N/A
Product Pipeline Texaco	-27	8.7 W	4500 Block Front Ave. 4500 Block	Matt McClincy Matt	PH Agr for RVSCM (8/00)	Ri	08/09/10	Overland Transport/Sheet Flow	N/A	N/A	N/A	N/A	none		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Texaco Product		8.7 W	Front Ave. 4500 Block	McClincy Matt	(8/00) PH Agr for RVSCM	RI	08/09/10	Bank Erosion Groundwater	N/A Ongoing	N/A Review of Guilds Lake Rail Yard data and Gunderson	N/A 4th quarter 2010	N/A Waiting on SCE to be	nane p Low		N/A Waiting for SCE to	N/A	N/A	N/A	N/A	N/A	N/A	NA	N/A	N/A
	2117	8.7 W	4500 Block Front Ave.	Matt McClincy	PH Agr for RESCM (8/00)	RI	08/09/10	Groundwater	Ongoing		4th quarter 2010	Waiting on SCE to be completed	pLow	pLow	Waiting for SGE to be completed.									

				urces of c	contamination to the		\Box			Source Con	trol Evalu	ation (SCE)				Source	Control	Decisions	(SCDs) an	d Status o	f Source Co	ntrol M	easures	(SCMs)
	Site	inform	nation			t status						Basis for determination is nee		control	Status of EPA	Source control		Status of EPA	SCM activities	Mass or volume of	Additional Proposed SCM activities to be	Date SCM	Status of EPA review of	Operaton and
Site name	ECSI#	River mile	Address	DEQ PM	Type of agreement directing source control	Project status	Date last modified (m-d-y)	SCE Pathway	Status of SCE	Major SCE tasks to be completed	Schedule for completing SCE	Pathway determination	Pathway	Site priority level	review of SCE decision	alternatives evaluation and schedule (m-y)	Selected SCMs	review of SCM selection decision	completed to date (m-y)	contaminants controlled	done and schedule (m- y)	completed (m-y)	completed SCM	maintenance requirements
Texaco Product	2117	8.7 W	4500 Block Front Ave.	Mett McClincy	PH Agr for RVSCM (8/00)	Rì	08/09/10	Stormwater	N/A	N/A	N/A	N/A	none		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Texaco Product	2117	8.7 W	4500 Block Front Ave.	Matt McGlincy	PH Agr for RVSCM (8/00)	RI	08/09/10	Overwater Activities	N/A	N/A	N/A	NA	none	THE S	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Texaco Product Pipeline	2117	8.7 W	4500 Block Front Ave.	Matt McClincy	PH Agr for RUSCM (8/00)	RI	08/09/10	Other	N/A	NA .	NA	N/A	none		N/A	N/A	NA	NA	N/A	N/A	N/A	N/A	N/A	N/A
Container Recovery	4015	88W 3	3900 NW Yeon	Karen Tamow	Pre-PH VCP Letter Age for RIFS	conditional NFA 2004	11/04/09	Overland Transport/Sheet Flow	N/A	N/A	N/A	N/A	none		N/A	N/A	N/A	N/A	N/A	N/A	NA	N/A	N/A	N/A
Container Recovery	4015	8,8 W 3	3900 NW Yeon	Karen Tarnow	Pre-PH VCP Letter Agr	conditional NFA 2004	11/04/09	Bank Erosion	NIA	N/A	N/A	N/A	none		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	NA	N/A
Container Recovery	4015	8.8 W 3	3900 NW Yeon	Karen Tarnow	Pre-PH VCP Letter Age for RVFS	conditional NFA 2004	11/04/09	Groundwater	Completed			insignificant pathway, no actions recommended	Low	Low	N/A		No SCM needed	Acres de la constante de la co		The same of the			Marie Marie	
Container Recovery	4015	8.8 W	3900 NW Yean	Karen Tarnow	None	conditional NFA 2004	11/04/09	Stormwater	Deferred	Stormwater characterization	No current schedule.	Wating on SCE to be completed	to be determined		Waiting on SCE completion							19		
Container	4015	88W	3900 NW Yeon	Karen	Pre-PH VCP Letter Ag	conditional	11/04/09	Overwater Activities	N/A	N/A	N/A	N/A	none		N/A	N/A	N/A	N/A	N/A	NA	N/A	N/A	N/A	N/A
Container			3900 NW Yeon	Tamow	for RVFS Pre-PH VCP Letter Ag	NFA 2004 conditional NFA 2004	11/04/09	Other	N/A	NA	N/A	N/A	none	1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	NA	N/A	N/A
Recovery Christensen Oi	1000000	Section 2	3821 NW St Helens	Shawn Rapp	VCP Letter Agr for PA (8/00)		07/27/10	Overland Transport/Sheet Flow	N/A	N/A	N/A	N/A	none		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Christensen O			3821 NW St Helens	Shawn Rapp	VCP Letter Agr for PA (8/00)	XPA	07/27/10	Bank Erosion	N/A	N/A	N/A	N/A	none		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Christensen O	2426	89W	3821 NW St Helens	Shawn Rapp	VCP Letter Agr for PA (8/00)	XPA	07/27/10	Groundwater	Ongoing	Part of Stormwater Assessment	3rd Otr 2011	to be determined	to be determined		Waiting on SCE to be completed;		Product recovery from groundwater - dual phase extraction							
Christensen O	2426	8.9 W	3821 NW St Helens	Shawn Rapp	VCP Letter Agr for PA (8/00)	XPA	07/27/10	Stormwater	Ongoing	Storm water sampling per JSCS and evaluation of groundwater preferential flow to storm sewer	3rd Qtr 2011	Waiting on SCE to be completed	p Med	p Med	Waiting on SCE to be completed;	N/A	Storm water BMPs and filtering catch basin sediment	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Christensen O	2426	8.9 W	3821 NW St Helens	Shawn Rapp	VCP Letter Agr for PA (8/00)	XPA	07/27/10	Overwater Activities	N/A	N/A	N/A	N/A	none		N/A	N/A	N/A	N/A	N/A	NA	N/A	N/A	N/A	N/A
Christensen O	2426	8.9 W	3821 NW St Helens	Shawn Rapp	VCP Letter Agr for PA (5/00)	XPA	07/27/10	Other	N/A	N/A	N/A	N/A	none		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Texaco Terminal	169	8.9 W	3800 NW St Helens	Matt McClincy	PH Agr for RVSCM (8/00)	Ri	08/09/10	Overland Transport/Sheet Flow	N/A	NA	N/A	N/A	nore		N/A	N/A	N/A	N/A	N/A	NA	N/A	N/A	N/A	N/A
Texaco Terminal	169	8.9 W	3600 NW St Helens	Matt McClincy	PH Agr for RVGCM (8/90)	RI	08/09/10	Bank Erosion	N/A	N/A	N/A	N/A	note		N/A	N/A	N/A	N/A	N/A	N/A	NA	N/A	N/A	N/A
Texaco Terminal	169	8.9 W	3800 NW St Helens	Matt McClincy	PH Agr for RI/SCM (8/00)	RI	08/09/10	Groundwater	Ongoing	2nd Quarter 2011	2nd Quarter 2011	Waiting on SCE to be completed	p Line	pLow	Waiting for SCE to be completed.									
Texaco Terminal	169	8.9 W	3800 NW St Helens	Matt McClincy	PH Agr for RISCM (8/00)	RI	08/09/10	Stormwater	Ongoing	Evaluating groundwater infiltration to storm sewer system	2nd Quarter 201	Waiting on SCE to be completed	to be determined		Waiting on SCE to be completed									STATE OF
Texaco Terminal	169	8.9 W	3800 NW St Helens	Matt McClincy	PH Agr for RVSCM (8/00)	Fel	08/09/10	Overwater Activities	NA	N/A	N/A	No known current sources (spills reported to OERS)	nose		N/A	N/A	NIA	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Texaco Terminal	169	6.9 W	3800 NW SI Helens	Matt McClincy	PH Agr for RVSCM (8/00)	RI	05/09/10	Other	N/A	N/A	N/A	N/A	none		N/A	N/A	N/A	N/A	N/A	NA	N/A	N/A	N/A	NA
Vanwater an Rogers (Univar)		9 W	3950 NW Yeor Ave	EPA lead; Holly Arrigoni	RCRA Coreective Action Order	Corrective Measures Implemen	пемьил	Overland Transport/Sheet Flow	N/A	NA .	NA	NA	None		N/A									-
Vanwater an Rogers	330	9 W	3950 NW Yeor Ave	EPA lead; Holly	RCRA Corrective Action Order	Corrective Measures Implemen	nemenn	Bank Erosion	N/A	NA NA	NA.	NA NA	None		N/A	1 - 1 - 1 -								
(Univar) Vanwater an Rogers (Univar)	330	9 W	3950 NW Yeor Ave	EPA lead; Holly Arrigoni	RCRA Corrective Action Order	Corrective Measures Implementation	nanann	Groundwater	Completed			Groundwater under control		to be	in	Corrective Measures Study Completed 4/21/05	Soil Vapor Extraction and Groundwater Pump and Tre	Completed	Sol Vapor Extracti and Groundwate Pump and Treat	r 468,000 lbs	Optimization of SVE a Groundwater Extracti Systems/2008 throug 2010	on	EPA notes that the discovery on NAPL, warrants a re-evaluation fo the remedy- schedule for this is in development.	Ongoing maintenance SVE wells, extraction wells and treatment
Vanwater an Rogers (Univar)		9 W	3950 NW Yeor Ave	EPA lead: Holly Arrigoni	RCRA Corrective Action Order	Corrective Measures Implement ation	00/05/40	Stormwater	Ongoing	Stormwaer Pathway Evaluation	1st Quarter 201	Waiting on SCE to be completed		eu	NA	Planned for 2nd Quarter 2011	er							

			suspected s	ources of	Project	he river t status				Source Con	trol Evalu	uation (SCE))			Source	Control	Decisions	(SCDs) ar	nd Status o	f Source Co	ntrol M	easures	(SCMs)
		River			Type of agreement	Project	Date last		Status of	Major SCE tasks to be	Schedule for	Basis for determinati		ce control	Status of EPA	Source control		Status of EPA	SCM activities	Mass or volume of	Additional Proposed	Date SCM	Status of EPA	8
Site name	ECSI#	mile	Address	DEQ PM	directing source control	status	modified (m-d-y)	SCE Pathway	SCE	completed	completing SCE	Pathway determination	Pathway priority level	Site priority level	review of SCE decision	alternatives evaluation and schedule (m-y)	Selected SCMs	review of SCM selection decision	completed to date	contaminants controlled	SCM activities to be done and schedule (m- y)	completed	review of completed SCM	Operaton and maintenance requirements
anwater and Rogers (Univer)	330	9 W	3950 NW Yeon Ave	EPA lead; Holly Arrigoni	RCRA Corrective Action Order	Corrective Measures Implement ation	08/05/10	Overwater Activities	N/A	NA NA	NA	NA	None		NA									
anwater and Rogers (Univar)	330	9 W	3950 NW Yeon Ave	EPA lead; Holly Arrigoni	RCRA Corrective Action Order	Corrective Measures Implement ation	08/05/10	Other																
Guilds Lake RR Yard	100	9.D W	3500 NW Yeon	Jim Orr	PH Agr for RVSCM (12/02)	RI	07/30/10	Overland Transport/Sheet Flow	N/A	NA	N/A	N/A	none		N/A	N/A	N/A	N/A	N/A	N/A:	NA	N/A	N/A	N/A
Guilds Lake RR Yard	100	9.0 W	3500 NW Yeon	Jim Ort	PH Agr for RVSCM (12/02)	RI	07/30/10	Bank Erosion	N/A	N/A	N/A	N/A	none		N/A	N/A	N/A	N/A	NA	N/A	N/A	N/A	N/A	N/A
Gullds Lake RR Yard	100	9.0 W	3500 NW Yeon	Jim Orr	PH Agr for RIISCM (12/02)	RI	07/30/10	Groundwater	Ongoing	GW Investigation ongoing	3rd Qtr 2011	Waiting on SCE to be completed	pLow		Walking on SCE to be completed									
Guilds Lake RR Yard	100	8.0 W	3500 NW Year	Jim Orr	PH Agr for RVSCM (12/02)	RI	97/30/10	Stormwater	Ongoing	SW Investigation ongoing;	3rd Qtr 2011	Walting on SCE to be completed	pLow	pLow	Waiting on SCE to be completed									
Guilds Lake RR Yard	100	9.0 W	3500 NW Yeon	Jim Orr	PH Agr for RI/SCM (12/02)	RI	07/30/10	Overwater Activities	N/A	N/A	NIA	N/A	none		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Sulids Lake RR Yard	100	9.0 W	3500 NW Year		PH Agr for RVSCM (12/02)	RI	07/30/10	Other	N/A	N/A	N/A	N/A	none		N/A	N/A	N/A	N/A	NA	N/A	N/A.	NA	N/A	N/A
Gunderson	1155	9.0 W	4350 SW Front	Shawn Rapp	Pre-PH VCP Formal Agr for RVFS (1994)	RI	08/05/10	Transport/Sheet Flow -	N/A	N/A, entirely paved and/or developed	N/A	N/A	none		NIA	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Gunderson	1155	9.0 W	4350 SW Front	Shawn Rapp	Pre-PH VCP Formal Agr for RVFS (1994)	RI	08/05/10	Overland Transport/Sheet Flow - Area 2	Ongoing	DEQ review of Focused Area 2 Rt report & source control screening	TBD pending DEQ's review of Focused Area 2 RI report	Pathway is complete	p High		Waiting on SCE to be completed.									
Gunderson	1155	9,0 W	4350 SW Front	Shawn Rapp	Pre-PH VCP Formal Agr for RVFS (1994)	RI	08/05/10	Overland Transport/Sheet Flow	Ongoing	DEQ review of Focused Area 3 RI report & source control	TBD pending DEQ's review of	Pathway is complete	p High		Waiting on SCE completion									
Gunderson	1155	9.0 W	4350 SW Front	Shawn Rapp	Pre-PH VCP Formal Agr for RVFS (1994)	RI	08/05/10	Bank Erosion - Area 1	Ongoing	Survey of erodible sols, follow- up sampling	1st Quarter 2011	Wating on SCE to be completed	p Low		Waiting on SCE completion									
Gunderson	1155	90W	4350 SW Front	Shawn Rapp	Pre-PH VCP Formal Age for RIFS (1994)	RI	08/05/10	Bank Erosion - Area 2	Ongoing	Blank characterization needs to be completed	1st Quarter 2011	Pathway a complete	High			2 FFS's drafted and rejected by DEQ for lack of data, sampling work plans and FFS revisions pending			interim SCM currently includes shrouding work areas during barge welding & sandblasting.					
Sunderson	1155	8.0 W	4350 SW Front	Shawn Rapp	Pre-PH VCP Formal Agr for RIFS (1994)	RI	08/05/10	Bank Erosion + Area 3	Ongoing	Bank characterization needs to be completed.	1st Quarter 2011	Pathway is complete.	High	High		Gunderson working on Area 3 FFS revisions based on Area 2 FFS comments.	Final SCMs TBD. Interim SCMs being considered include soil exacustion, selected area revegetation, and engineered basilization.							
Gunderson	1155	9.0 W	4350 SW Front	Shawn Rapp	Pre-PH VCP Formal Agr for RIFS (1994)	RI	08/05/10	Overviater Activities - Area 3	N/A	N/A	N/A	No known current sources (spills will be reported to OERS)	none		N/A	N/A	N/A	NA	N/A	N/A	N/A	N/A	N/A	N/A
Sunderson	1155	9.0 W	4350 SW Front	Shawn Rapp	Pre-PH VCP Formal Agr for RVFS (1994)	Ri	08/05/10	Groundwater - Area 1	Ongoing	Complete site wide groundwater screening to update sampling program	1st Qtr 2011	Groundwater is a complete pathway, VOC plume migrating to/under river.	p Med		EPA comments received 5/03	Alternatives evaluation completed, EPA comments received 5/2003	Hydrautic containment and source removal using air-	SCD submitted to EPA 2/2003, EPA comments received 5/2003	P&T and AS/SVE systems installed and operating	~40 fbs. of HVOCs removed as of 7/07	Conduct SCMs effectiveness evaluation(s). Schedule			Quarterly performance monitoring and reports
Sunderson	1155	9.0 W	4350 SW Front	Shawn Rapp	Pre-PH VCP Formal Agr for RIFS (1994)	Ri	08/05/10	Groundwater - Arra 2	Ongoing	RI in review, also see	1st Qfr 2011	Waiting on SCE to be	to be		Waiting on SCE to			J/ZUUJ			TBO.			

	Confin	mad or	evenacted e	ources of	contamination to the	ne river				law decrease a server						Cauran	Control	Decisions	(SCDe) an	d Status of	f Source Cor	trol M	easures	(SCMs)
		11.11.2 (1.11.1)	mation	ources or	Project					Source Conf	trol Evalu					Source	Control	Decisions	(SCDS) all	u otatus o	l douite doi	101111		(Como)
Site name	50014	River	Address	DEQ PM	Type of agreement directing source	Project	Date last modified	SCE Pathway	Status of	Major SCE tasks to be	Schedule for	Basis for determination is need		Site	Status of EPA review of SCE	Source control alternatives evaluation	Selected SCMs	Status of EPA review of SCM	SCM activities completed to date	Mass or volume of contaminants		Date SCM completed (m-y)	completed	Operaton and maintenance requirements
Site name	EGSI	mile	Address	DEGPM	control	status	(m-d-y)	Joe rammay	SCE	completed	completing SCE	Pathway determination	priority level	priority level	decision	and schedule (m-y)		selection decision	(m-y)	controlled	y)	(m-y)	SCM	requaements
Gunderson	1155	9.0 W	4350 SW From	Shawn Rapp	Pre-PH VCP Formal Agr for RIFS (1994)	RI	08/05/10	Groundwater - Arts 3	Ongoing	Rt in review, also see comment for Area 1	1st Qtr 2011	Pathway is complete	p Mid		Waiting on SCE to be completed.									
Gunderson	1155	9.0 W	4350 SW Fron	Shawn Rapp	Pre-PH VCP Formal Agr for RIFS (1994)	RI	08/05/10	Stormwater - Area 1	Ongoing	Review stormwater sampling plan (10/05) and catch basin sediment sampling report	2nd Quarter 2011	Waiting on SCE to be completed	p Mod		Waiting on SCE to be completed.		Interim SCMs being evaluated		Current BMPs include catch basin filter inserts & annual clean-out of					
Gunderson	1155	9.0 W	4350 SW From	Shawn Rapp	Pre-PH VCP Formal Agr for RVFS (1994)	Ri	08/05/10	Stormwater - Area 2	Ongoing	(01/08) Upgrade SW system around faunchways - piping and treatment	2nd Quarter 2011	Pathway is complete	p High		Waiting on SCE to be completed.		Interim SCMs in design include, legacy sediment piping clearouts		catch basins Current BMPs include catch basin filter inserts, annual clean-out of catch					
Gunderson	1155	9.0 W	4350 SW Fron	Shawn Rapp	Pre-PH VCP Formal Agr for RVFS (1994)	RI	08/05/10	Stormwater - Area 3	Completed	Basines.	2nd Quarter 2011	Pathway is complete	High			TBD pending DEQ's review of Ri report and 2006/2009 storm water system sampling reports	Final SCMs TBD & Interim SCMs being considered		Current BMPs include catch basin filter inserts, annual clean-out of catch					
Gunderson	1155	9.0 W	4350 SW From	Shawn	Pre-PH VCP Formal Agr for RVFS (1994)	RI	08/05/10	Other	N/A	NA	N/A	NA	nore		N/A	N/A	NA	N/A	NIA	N/A	N/A	N/A	N/A	N/A
Freightliner (Parts Mfg	115	9.2 E	5400 N Basin	Mike Romero	PH Agr for RVSCM (12/02)	RI	06/30/10	Overland Transport/Sheet Flow	N/A	N/A	N/A	N/A	nore		N/A	NA	NA	NIA	N/A	NA	N/A	N/A	N/A	N/A
Plant) Freightliner (Parts Mig Plant)	115	9.2E	5400 N Basin	in.	PH Agr for RVSCM (12/02)	RI	06/30/10	Bank Erosion	N/A	N/A	N/A	N/A	none		NIA	N/A	NA	N/A	N/A	N/A	N/A	N/A	NA	NA
Freightliner (Parls Mfg Plant)	115	9.2 E	5400 N Basin	Mike Romero	PH Agr for RUSCM (12/02)	RI	06/30/10	Groundwater	Ongoing	Review draft Groundwater SCE	1st Qtr 2011	to be determined	pLiw						POST OF					
Freightline (Parts Mfg Plant)	115	9.2 E	5400 N Basin	Mike Romero	PH Agr for RVSCM (12/02)	FI	06/30/10	Stormwater	Ongoing	Additional stormwaler sampling needed	1st Qtr 2011	Waiting on SCE to be completed	to be determined	plow			RP voluntary cleanout of stormwater system prior to completing screening							
Freightliner (Parts Mig	115	9.2 E	5400 N Basin	Mike Romero	PH Agr for RI/SCM (12/02)	RI	06/30/10	Overwater Activities	N/A	N/A	N/A	N/A	none		NA	N/A	NA	NA	N/A	N/A	N/A	N/A	N/A	N/A
Plant) Freightline (Parts Mg		92E	5400 N Basin	Mike	PH Agr for RVSCM	PI	06/30/10	Other	N/A	N/A	N/A	N/A	none	1	N/A	NA	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Container Managemen	4784	9.3W	2000 NW CH	Jim Orr	(12/02) Leter Agreement for Stormwater Assessment and Source Control	SCE	07/29/10	Overland Transport/Sheet Flow	N/A	N/A	N/A	N/A	N/A		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Container Manageme	nt. 4784	9.3W	3000 NW St Helens Rd	Jim Orr	5/28/08 Leter Agreement for Stormwater Assessment and Source Control	SCE	07/29/10	Bank Erosion	N/A	N/A	N/A	N/A	N/A		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Container Manageme		9.3W	3000 NW St Helens Rd	Jim Orr	5/26/08 Leter Agreement for Stormwater Assessment and Source Control	SCE	07/29/10	Groundwater Investigation of Dry Wells Only	Ongoing	Complete characterization	TBD	Walting on SCE to be completed	pLow		Waiting on SCE completion									
Container Manageme	nt 4784	4 9.3W	3000 NW St Helens Rd	Jim Orr	5/26/08 Leter Agreement for Stormwater Assessment and Source Control	SCE	07/29/10	Stormwater	Ongoing	Complete characterization	ТВО	Walking on SCE to be completed	p Med	p Med	Waiting on SCE completion									
Container Manageme		7 9.3W	3000 NW St Helens Rd		5/25/08 Leter Agreement for Stormwater Assessment and Source Control	SCE	07/29/10	Overwater Activities	N/A	N/A	N/A	N/A	N/A		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Container Manageme		4 9.3W	3000 NW St Helens Rd		5/26/08 Leter Agreement for Stormwater Assessment and Source Control 5/26/08	SCE	07/29/10	Other	N/A	N/A	No current schedule.	Waiting on SCE to be completed	to be determined		Waiting on SCE completion (m-y)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Columbia American Plating	29	9.3W	3003 NW 351 Ave	Mark Pugt	Consent Judgment	SCE	05/25/10	Overland Transport/Sheet Flow	N/A	N/A	N/A	N/A	nche		n/a	N/A	N/A	N/A	NA	N/A	NA	N/A	N/A	NA
Columbia American Plating	29	9.3W	3003 NW 351 Ave	Mark Pugi	Consent Judgment	SCE	05/25/10	Bank Erosion	N/A	N/A	NA	NA	cone		N/A	N/A	N/A	NA	NA	N/A	NA	NIA	N/A	N/A
Columbia American Plating	29	93W	3003 NW 351 Ave	h Mark Pugi	n Consent Judgment	SCE	05/25/10	Groundwater	Completed	N/A	N/A	Incomplete pathway	none	pLow	N/A	N/A	NA	NA	N/A	N/A	N/A	N/A	N/A	N/A
Columbia America Plating	29	93W	3003 NW 35 Ave	h Mark Pug	h Consent Judgment	SCE	05/25/10	Stormwater	Completed	None	SCE will be submitted with performance monitoring expected 3rd Qu 2011	Pathway is complete	pLow		Weiting on SCE completion	Wating on SCE completion	Line Cleanou completed an new stormwate system constructed 2010	d	Line Cleanout completed	3,740 gallons of standing water an storm line cleanor water removed; 2,1 lons in-line sedime disposed of as F- listed waste.	Performance monitors 4th Qtr 2010 - 2nd Qt 2011	7 780	ТВО	ТВО

			suspected s	ources of	contamination to t	he river t status				Source Con	trol Eval	uation (SCE)				Source	Control	Decisions	(SCDs) ar	nd Status o	f Source Co	ntrol M	eacuros	(SCMe)
Site name	ECSI	River mile	Address	DEQ PM	Type of agreement directing source control	Project status	Date last modified (m-d-y)	SCE Pathway	Status of SCE	Major SCE tasks to be completed	Schedule for completing SCE	Basis for determination	Pathway	Site	Status of EPA review of SCE decision	Source control alternatives evaluation and schedule (m-y)		Status of EPA review of SCM selection decision	SCM activities completed to date	Mass or volume of contaminants controlled	Additonal Proposed SCM activities to be done and schedule (m- y)	Date SCM	Status of EPA review of completed SCM	
Columbia American Plating	29	9.3W	3003 NW 35th Ave	Mark Pugh	Consent Judgment	SCE	05/25/10	Overwater Activities	N/A	NA	N/A	N/A	level	level	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Columbia American Plating	29	9.3W	3003 NW 35th Ave	Mark Pugh	Consent Judgment	SCE	05/25/10	Other	N/A	N/A	N/A	N/A	none		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Wilhelm Trucking	69	9.3W	3250 and 3074 NW St. Helens Road	Jim Orr	Letter Agreement for Stormwater Assessment and Source Control 5/26/08	SCE	07/29/10	Overland Transport/Sheet Flow	N/A	N/A	N/A	N/A	N/A		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Withelm Trucking	69	9.3W	3250 and 3074 NW St. Helens Road	Jim Orr	Letter Agreement for Stormwater Assessment and Source Control 5/26/08	SCE	07/29/10	Bank Erosion	N/A	N/A	N/A	N/A	none		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Wilhelm Trucking	69	9,3W	3251 and 3074 NW St. Helens Road	Jim Orr	Letter Agreement for Stormwater Assessment and Source Control 5/26/08	SCE	07/29/10	Groundwater	NIA	N/A	NA.	N/A	none		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Withelm Trucking	69	9.3W	3252 and 3074 NW St. Helens Road	Jim Orr	Letter Agreement for Stormwater Assessment and Source Control 5/26/08	SCE	07/29/10	Stormwater	Ongoing	Work plan under review	4th Quarter 2010 est	to be determined	p Med	p Med	Waiting on SCE completion									
Withelm Trucking	69	9.3W	3253 and 3074 NW St. Helens Road	Jim Orr	Letter Agreement for Stormwater Assessment and Source Control 5/26/08	SCE	07/29/10	Overwater Activities	N/A	N/A	NA	N/A	N/A		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Wilhelm Trucking	69	9.3W	3250 and 3074 NW St Helens Road	Jim Orr	Letter Agreement for Stomwater Assessment and Source Control 5/25/08	SCE	07/29/10	Other	N/A	N/A	N/A	N/A	N/A		N/A	NA.	NA .	NA	NA	NA	NA NA	NA:	NA NA	N/A
E Decommis sioning			2727 NW 29th	Torn Gainer	PH Agr for XPA (1/04)	XPA	08/02/10	Overland Transport/Sheet Flow	N/A	N/A	N/A	N/A	none		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
sioning	4003	9.5 W	2727 NW 29th	Tom Gainer	PH Agr for XPA (1/04)	XPA	08/02/10	Bank Erosion	N/A	N/A	N/A	N/A	none		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
E Decommis sioning	4003	9.5 W	2727 NW 29th	Tom Gainer	PH Agr for XPA (1/04)	XPA	08/02/10	Groundwater	Ongoing	Review draft SCE	3rd Quarter 2011	N/A	p Low		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
E Decommis sioning	4003	9.5 W	2727 NW 29th	Tom Gainer	PH Agr for XPA (1:04)	XPA	08/02/10	Stormwater	Completed		2/06 SCE Report submitted	Pathway is complete	Medium	Medium	Done	SCM implementation report summer 2007	Removal of PCB contaminated sediment from onsite catch basins and pipes, new CBs/filters, new pipes, paving		1st qtr. 2007			11/25/08 Post-SCM monitoring completed		Continued BMPs
E Decommis- sioning	4003	9.5 W	2727 NW 29th	Tom Gainer	PH Agr for XPA (1/04)	XPA	08/02/10	Overwater Activities	N/A	N/A	N/A	N/A	none		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Galvanizers Company	1196	9.6 W	2406 NW 30th	Jim Orr	PH Agr for XPA (10/03)	XPA	07/29/10	Overland Transport/Sheet Flow	N/A	N/A, site located ~4,500 feet from river	N/A	N/A	none		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Galvanizers Company	1196	9.6 W	2406 NW 30th	Jim Orr	PH Agr for XPA (10/03)	XPA	07/29/10	Bank Erosion	N/A	N/A, site located ~4,500 feet from river	N/A	N/A	none		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Galvanizers Company	1196	9.6 W	2406 NW 30th	Jim Orr	PH Agr for XPA (10/03)	XPA	07/29/10	Groundwater	Ongoing	Draft SCE in review	4th Qtr 2010	Pathway is complete	p Med		Waiting on SCE to be completed.									
Galvanizers Company	1196	9.6 W	2406 NW 30th	Jim Orr	PH Agr for XPA (10/03)	XPA	07/29/10	Stormwater	Ongoing	Draft SCE in review	4th Otr 2010	Pathway is complete	p Med	p Med	Waiting on SCE to be completed.		Stormwater RX System installed and Operational		Collecting/reusing Main Plant canopy roof run-off in galvantzing process (5/07), repairing/sealing pavement in NE plant yard (8/07).		Sealing unused/unecessary connections to City piping (Winter 2008), site paving and pavement sealing (Summer 2008)	Stormwater RX operating January 2010		Maintenance of Stormwater RX System
Galvanizers Company	1196	9.6 W	2406 NW 30th	Jim Orr	PH Agr for XPA (10/03)	XPA	07/29/10	Overwater Activities	N/A	N/A, site located ~4,500 feet from river	N/A	N/A	none		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Galvanizers Company	1196	9.6 W	2406 NW 30th	Jim Orr	PH Agr for XPA (10/03)	XPA	07/29/10	Other	N/A	N/A	N/A	N/A	none		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
aco Pumps	146	9.6 W	2551 NW 30th	Jim Anderson	ICP Agreement (01/03/07)	NFA	01/24/08	Overland Transport/Sheet Flow	N/A	N/A	N/A	N/A	none		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
aco Pumps	148	9.6 W	2551 NW 30th	Jim Anderson	ICP Agreement (01/03/07)	NFA	01/24/08	Bank Erosion	N/A	N/A	N/A	N/A	none	- 17.5	N/A	N/A	N/A	N/A	N/A	N/A	NA	N/A	N/A	N/A
aco Pumps	146	9.6 W 2	2551 NW 30th	Jim Anderson	ICP Agreement (01/03/07)	NFA	01/24/08	Groundwater	N/A	NA	N/A	N/A	none	700	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
aco Pumps	145	9.8 W	2551 NW 30th	Jim Anderson	ICP Agreement (01/03/07)	NFA	01/24/08	Stormwater	Completed	N/A	al less	No current pathway, legacy solids in storm lines to be investigated	Low	Low	Waiting on SCE completion	1		1	1			RETURN.		

C				urces of	contamination to th					Source Conf	trol Evalu	ation (SCE)				Source	Control	Decisions	(SCDs) an	d Status o	f Source Cor	ntrol M	easures	(SCMs)
Site name		River mile	nation Address	DEQ PM	Type of agreement directing source control	Project status	Date last modified (m-d-y)	SCE Pathway	Status of SCE	Major SCE tasks to be completed	Schedule for completing SCE	Basis for determination is nee	Pathway priority	Site priority	Status of EPA review of SCE decision	Source control alternatives evaluation and schedule (m-y)	Selected SCMs	Status of EPA review of SCM selection decision	SCM activities completed to date (m-y)	Mass or volume of contaminants controlled	Additional Proposed SCM activities to be done and schedule (m- y)	Date SCM completed (m-y)	Status of EPA review of completed SCM	Operaton and maintenance requirements
aco Pumps	146	GAW	2551 NW 30th	Jim	ICP Agreement	NFA	01/24/08	Overwater Activities	N/A	N/A	N/A	N/A	level	level	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
aco Pumps			2551 NW 30th	Anderson	(01/03/07) ICP Agreement	NFA	01/24/08	Other	N/A	N/A	N/A	N/A	none		N/A	N/A.	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Port of Portland		200	3556 NW Front	Anderson Tom Gainer	(01/03/07) IGA	XPA	02/19/09	Overland Transport/Sheet Flow	N/A	N/A	N/A	N/A	none		N/A	N/A	N/A	N/A	N/A:	N/A	N/A	NIA	N/A	N/A
Port of Portland Terminal 2	18.28		3556 NW Front	Tom Gainer	IGA	ХРА	02/19/09	Bank Erosion	N/A	NA	N/A	NA	none		N/A	N/A:	N/A	NA	N/A	NA	NA	N/A	N/A	N/A
Port of Portland	2769	10.0 W	3556 NW Front	Tom Gainer	IGA	XPA	08/02/10	Groundwater	Origoing		4th Qtr 2010	Insignificant pathway, no actions recommended	pLow	1	Waiting on SCE to be completed					th take				
Port of Portland	2769	10.0 W	3556 NW Front	Torn Gainer	IGA	ХРА	08/02/10	Stormwater	Ongoing	Evaluate stormwater system	4th Oir 2010	Waiting on SCE to be completed	to be determined	plow	Waiting on SCE to be completed	THE PROPERTY OF		THE REAL PROPERTY.						
Port of Portland	2769	10.0 W	3556 NW Front	Tom Gainer	IGA	ХРА	02/19/09	Overwater Activities	N/A	N/A	N/A	N/A	nons		NA	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	NA
Port of Portland Terminal 2	2789	10.0 W	3556 NW Front	Tom Gainer	IGA	XPA	02/19/09	Other	N/A	N/A	N/A	N/A	nons		N/A	N/A	N/A	NIA	N/A	N/A	N/A	N/A	N/A	N/A
albag Metals	5059	10.1 W	2495 NW Nicoli St.	Jim Orr	Letter Agreement for Source Control Assessment 2009	SCE	07/28/10	Overland Transport/Sheet Flow	N/A	N/A	N/A	N/A	none		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
aibag Metals	5059	10.1 W	2495 NW Nicoli St.	Jim Orr	Letter Agreement for Source Control Assessment 2009	SCE	07/28/10	Bank Erosion	N/A	N/A	N/A	N/A	nore		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
albag Metals	5059	10.1 W	2495 NW Nicoli St.	Jim Orr	Letter Agreement for Source Control Assessment 2009	SCE	07/28/10	Groundwater	Ongoing	Two quarters of GW monitoring complete. Final report due in October 2010. No significant issues.	December 2010	Pathway is complete	none		Waiting on SCE completion (m-y)	evaluation to be part of upland FS; schedule for completing draft/final: December 2010	No SCM needed	June 2011 Tenative Date	N/A	N/A	N/A	N/A	Review Pending SCA not submitted.	no alternatives evaluation needed
albag Metals	5059	10.1 W	2495 NW Nicoli St.	Jim Orr	Letter Agreement for Source Control Assessment 2009	SCE	07/28/10	Stormwater	Ongoing	Pilot study to evaluate surface washing of PCB contamination is complete. Focused Feaseability Study in production. Most likely surface capping and SW treatment.	No current schedule.	Pathway is complete	Medum	Medium	Waiting on SCE completion (m-y)	evaluation to be part of uptand FS; schedule for completing draft/final: August 2011	stormwater catcl basin in-line cleanout, stormwater BMPs, asphalt and concrete surface capping/sealing Stormwater RX System Installation, and rnonitoring		stormwater catch basin in-line cleanout, stormwater BMPs, monitoring		ongoing stormwater monitoring through spring 2011	August 2011	Review Pending, SCA not Submitted.	effectiveness monitorin
Calbag Metals	5059	10.1 W	2495 NW Nicoli St.	Jim Orr	Letter Agreement for Source Control Assessment 2009	SCE	07/28/10	Overwater Activities	N/A	N/A	N/A	N/A	none		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Calbag Metals	5059	10.1 W	2495 NW Nicoli St.	Jim Orr	Letter Agreement for Source Control Assessment 2009	SCE	07/28/10	Other	N/A	N/A	N/A	N/A	none		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
UPRR Albina	178	10.3 E	2745 N Interstate	Mike Romero	PH Agr for RVSCM	RI	06/30/10	Overland Transport/Sheet Flow	Submitted	Review document	4th Quarter 2010	SCE complete, DEQ review underway	pLaw		Waiting on SCE to be completed							M		
UPRR Albina	178	10.3 E	2745 N Interstate	Mike Romero	PH Agr for RVSCM (3/02)	RI	06/30/10	Bank Erosion	Submitted	Review document	Alth Quarter 2010	SCE complete, DEQ review underway	pLow		Walting on SCE to be completed			April 1						
UPRR Albina	178	10.3 €	2745 N Interstate	Mke Romero	PH Agr for RVSCM (3/02)	Ri	06/30/10	Groundwater	under revision	n Review document	4th Quarter 2010	SCE complete, DEQ review underway	to be determine	d pLow	Waiting on SCE to be completed									
UPRR Albina	178	10.3 E	2745 N Interstate	Mike Romero	PH Agr for RVSCM (3/02)	RI	06/30/10	Stormwater	Submitted	Review document	4th Quarter 2010	SCE complete, DEQ review underway	to be determine		Waiting on SCE to be completed		RP cleaned ou stormwater system prior to completion of				La constitution of the con			Transpirit
UPRR Albina	178	103E	2745 N Interstate	Mike Romero	PH Agr for RVSCM (3/02)	RI	08/30/10	Overwater Activities	N/A	N/A	N/A	NA	none		NA	NA	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
UPRR Albina	178	10.3 E	2745 N Interstate	Mike Romero	PH Agr for RVSCM (3/02)	RI	06/30/10	Other	N/A	N/A	N/A	N/A	none		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Goldendale Aluminum	2440	10.3 E	2600 N River	Tom Gainer	PH Letter Agr for XP (2/00)	A NFA 5/2004	03/06/06	Overland Transport/Sheet Flow	Completed			Insignificant pathway, n			EPA reviewed an commented 5/04	d	No SCM needs	ed					N/A	
Goldendale Aluminum	2440	10.3 E	2600 N River	Tom	PH Letter Agr for XP.	A NFA 5/2004	03/06/06	Bank Erosion	NA	N/A	N/A	N/A	none		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

			rmation	sources o	f contamination to t Projec	t status				Source Cor	itrol Evalu	uation (SCE)				Source	Control	Decisions	(SCDs) ar	nd Status o	of Source Co	ntrol M	easures	(SCMs)
Pia.		River		22245	Type of agreement	Project	Date last		Status of	Major POR tool	Pat- 1	Basis for determination		e control	Status of EPA	Source control		Status of EPA			Additonal Proposed	W. F. Con 1977	Status of EPA	- SMI
Site name	ECSI#	mile	Address	DEQ PM	directing source control	status	modified (m-d-y)	SCE Pathway	SCE	Major SCE tasks to be completed	Schedule for completing SCE		Pathway priority level	Site priority level	review of SCE	alternatives evaluation and schedule (m-y)	Selected SCMs	review of SCM selection decision	SCM activities completed to date (m-y)	Mass or volume of contaminants controlled	SCM activities to be done and schedule (m- y)	Date SCM completed (m-y)	review of completed SCM	Operaton and maintenance requirements
Goldendale Aluminum	2440	10.3 E	2600 N River	Tom Gainer	PH Letter Agr for XPA (2/00)	NFA 5/2004	03/06/06	Groundwater	Completed		Maria de	Insignificant pathway; no actions recommended			EPA reviewed and commented 5/04		No SCM needed		Lifema		DOM:		N/A	page ny
Goldendale Aluminum	2440	10.3 E	2600 N River	Tom Gainer	PH Letter Agr for XPA (2/00)	NFA 5/2004	03/06/06	Stormwater	Completed			Insignificant pathway, no actions recommended	Low	Low	EPA reviewed and commented 5/04		No SCM needed						N/A	
Goldendale Aluminum	2440	10.3 E	2600 N River	Tom Gainer	PH Letter Agr for XPA (2/00)	NFA 5/2004	03/06/06	Overwater Activities	N/A	N/A	N/A	N/A	hone		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Goldendale Aluminum	2440	103E	2600 N River	Tom Gainer	PH Letter Agr for XPA (2/00)	NFA 5/2004	03/06/08	Other	N/A	N/A	NA	N/A	none	E C	N/A	N/A.	N/A	N/A	N/A	N/A	N/A	N/A	N/A	NA
PGE Substation E	3976	10.4 W	2635 NW From Ave.	t Tom Gainer	VCP	NFA	12/22/06	Overland Transport/Sheet Flow	N/A	N/A	N/A	N/A	none		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
PGE Substation E	3976	10.4 W	2635 NW From Ave.	Tom Gainer	VCP	NFA	12/22/06	Bank Erosion	N/A	N/A	N/A	N/A	none		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
PGE Substation E	3976	10.4 W	2635 NW From Ave.	Tom Gainer	VCP	NFA	12/22/06	Groundwater	Completed			Insignificant pathway, no actions recommended	Low		EPA commendted on SCD in 10/06	Source Control Decision and NFA issued 12/6/06								
PGE Substation E	3976	10.4 W	2635 NW From Ave.	Tom Gainer	VCP	NFA	12/22/06	Stormwater	N/A	N/A	N/A	N/A	лопе	Low	N/A	N/A	N/A	N/A	NA	N/A	N/A	NIA	N/A	N/A
PGE substation E	3976	10.4 W	2635 NW From Ave.	Tom Gainer	VCP	NFA	12/22/06	Overwater Activities	N/A	NA	N/A	N/A	none		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
PGE ubstation E	3976	10.4 W	2635 NW Front Ave.	Tom Gainer	VCP	NFA	12/22/06	Other	N/A	N/A	NA	NA	none		N/A	N/A	N/A	N/A	NA	N/A	N/A	N/A	N/A	N/A
ulzer Pump	1235	10.4 W	2800 NW Front	Mark Pugh	Letter Agr. for XPA (9/02)	SCE	05/25/10	Overland Transport/Sheet Flow	N/A	Qualitative Assessment	N/A	N/A	none		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
ulzer Pump	1235	10.4 W	2800 NW Front	Mark Pugh	Letter Agr for XPA (9/02)	SCE	05/25/10	Bank Erosion	Completed	None	Pending completion of storm water evaluation	Waiting on SCE to be completed	p Med		Waiting on SCE to be completed									
ulzer Pump	1235	10.4 W	2800 NW Front	Mark Pugh	Letter Agr. for XPA (9/02)	SCE	05/25/10	Groundwater	Ongoing	Need for additional evaluation and possible sampling	4th Quarter 2010	Waiting on SCE to be completed	p Low		Waiting on SCE to be completed									
ulzer Pump	1235	10.4 W 2	2800 NW Front	Mark Pugh	Letter Agr. for XPA (9/02)	SCE	05/25/10	Stormwater	Ongoing	Complete SCE sampling and reporting	4th Quarter 2010	Waiting on SCE to be completed	p Med	p Med	Waiting on SCE to be completed		Storm line and catch basin cleanout		Cleanout completed in Oct 2006	25 tons of sludge	twice annual cleaning of catch basins			periodic inspection and maintenance; twice
olzer Pump	1235	10.4 W 2	2800 NW Front	Mark Pugh	Letter Agr. for XPA (9/02)	SCE	05/25/10	Overwater Activities	N/A	N/A	N/A	No known current sources (spills reported to OERS)	none		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	annual cleanout
	1235	10.4 W 2	2800 NW Front	Mark Pugh	Letter Agr. for XPA (9/02)	SCE	05/25/10	Other	N/A	N/A	N/A	N/A	none		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Morth.	3377	10.8 W 2	2200 NW Front	Tom Gainer	PH Agr for RVSCM	FS	09/01/10	Overland Transport/Sheet Flow	N/A	N/A	N/A	N/A	none		NA	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Port of Portland erminal 1 North	3377	10.6 W 2	2200 NW Front	Tom Gainer	PH Agr for RVSCM	FS	09/01/10	Bank Erosion	N/A	N/A	N/A	N/A	none		N/A	NA	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Danishand	3377	10.6 W 2	2200 NW Front	Tom Gainer	PH Agr for RVSCM	FS	09/01/10	Groundwater	Completed			Insignificant pathway, no actions recommended	p Low	pLow	Waiting on SW SCE to be completed									
	3377	10.6 W 2	2200 NW Front	Tom Gainer	PH Agr for RVSCM	RI	09/01/10	Stormwater	Ongoing	Complete stormwater sampling by BES	4th Qtr 2010	Waiting on SCE to be completed	pLow	1	Waiting on SCE to be completed			Serve Mar			CONTRACTOR NAMED IN	19.8		No Pilan

			suspected so	ources of	contamination to the Project	2017/03/2012				Source Con	trol Evalu	ation (SCE)				Source	Control	Decisions	(SCDs) ar	d Status o	f Source Co	ntrol M	easures	(SCIVIS)
					Type of agreement	Burlant	Date last		Status of	Major SCE tasks to be	Schedule for	Basis for determination is nee		control	Status of EPA	Source control alternatives evaluation	Salacted SCMs	Status of EPA review of SCM	SCM activities completed to date	Mass or volume of contaminants	Additonal Proposed SCM activities to be done and schedule (m-	Date SCM completed	Status of EPA review of completed	Operaton and maintenance
Site name	ECSI#	River	Address	DEQ PM	directing source control	Project status	modified (m-d-y)	SCE Pathway	SCE	completed	completing SCE	Pathway determination	Pathway priority level	Site priority level	review of SCE decision	and schedule (m-y)	Selected ouris	selection decision	(m-y)	controlled	done and schedule (m- y)	(m-y)	SCM	requirements
Port of Portland Ferminal 1	3377	10.6 W	2200 NW Frant	Tom Gainer	PH Agr for RVSCM	FS	09/01/10	Overwater Activities	N/A	N/A	NA	N/A	none	pit.	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	NA	N/A
North Port of Portland Terminal 1	3377	10.6 W	2200 NW Front	Tom Galner	PH Agr for RVSCM	FS	09/01/10	Other	N/A	N/A	N/A	N/A	none		N/A	N/A	NA	N/A	N/A	N/A	NA	N/A	N/A	N/A
North Riverscape aka Port of ortland T1S)	2542	10.9 W	2100 NW Front	Matt McClincy	RD/RA Agreement (06/06/03)	Conditional NFA 6/2003	03/13/06	Overland Transport/Sheet Flow	Completed			Insignificant pathway, no actions recommended	Low		EPA did not review SCD since site was outside PH		Soil removal and management plan during development; Deed restrictions						EPA did not review SCD since site was outside PH	
Riverscape aka Port of ortland T1S)	2642	10.9 W	2100 NW Front	Matt McClincy	RD/RA Agreement (06/06/03)	Conditional NFA 5/2003	03/13/05	Bank Erosion	Completed			Insignificant pathway, no actions recommended	Low		EPA did not review SCD since site was outside PH		No SCM needed			Life and			EPA did not review SCD since site was outside PH EPA did not	
Riverscape aka Port of ortland T1S)	2642	10.9 W	2100 NW Front	Matt McClincy	RD/RA Agreement (08/05/03)	Conditional NFA 6/2003	03/13/08	Groundwater	Completed			Insignificant pathway, no actions recommended	Low	Low	EPA did not review SCD since site was outside PH		No SCM needed			NOTE OF			review SCD since site was outside PH EPA did not	
Riverscape aka Port of ortland T1S)	2642	10.9 W	2100 NW Front	Matt McClincy	RD/RA Agreement (06/06/03)	Conditional NFA 6/2003	03/13/06	Stormwater	Completed			Insignificant pathway, no actions recommended	Low		EPA did not review SCD since site was outside PH		No SCM needed						review SCD since site was outside PH EPA did not	
Riverscape aka Port of ordand T1S)	2642	10.9 W	2100 NW Front	Matt McClincy	RD/RA Agreement (06/06/03)	Conditiona NFA 6/2003	03/13/06	Overwater Activities	Completed			Insignificant pathway; no actions recommended	Low		EPA did not review SCD since site was outside PH		No SCM needed		7				review SCD since site was outside PH	
Riverscape aka Port of ortland T1S)	2642	10.9 W	2100 NW Front	Matt McClincy	RD/RA Agreement (06/06/03)	Conditiona NFA 6/2003	03/13/06	Other	N/A	NA	N/A	N/A	enon		NIA	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Pacificorp	5117	11.6 E	Multiple sites in Albina Riverlots area		PH Agr for RI/SCM	XPA	07/27/10	Overland Transport/Sheet Flow	N/A	N/A	N/A	N/A	none										*:	
Pacificorp	5117	11.6 E	Multiple sites in Albina Riveriots area	Dan Hafley	PH Agr for RVSCM	XPA	07/27/10	Bank Erosion	N/A	N/A	N/A	N/A	none											
Pacificorp	5117	11.6 E	Multiple sites in Albina Riverlots	Dan Haffey	PH Agr for RVSCM	XPA	07/27/10	Groundwater	Ongoing	PA in progress	4th quarter 2010	Waiting on SCE to be completed	plow											
Pacificorp	5117	11.6 E	Multiple sites in Albina Riverioti area	Dan Hafley	PH Agr for RVSCM	XPA	07/27/10	Stormwater	Ongoing	Soil abatement and stormwater monitoling	1st Qtr 2011	Waiting on SCE to be completed	p Med				Selected soil removals in progress							
Pacificorp	5117	11.6 E	Multiple sites in	Dan Haffey	PH Agr for RI/SCM	XPA	07/27/10	Overwater Activities	N/A	N/A	N/A	N/A	none					1						

DEQ Milestone Report Information about the Source Control Table

Use Of This Sheet

This spreadsheet is intended to track and share information regarding the status of current and potential future upland source control measures. Information is logged by the status of the evaluation in each pathway. The following pathways are included: overland transport, back erosion, groundwater, stormwater, overwater activities, and other (see definitions below). Site included in this spreadsheet are currently being investigated under DEQ oversight or a recent source control decision made for the facility. For more information on these sites please visit DEQ's Environment Cleanup System Information (ECSI) database at http://www.deq.state.or.us/wmc/ECSI/ecsiquery.htm

Definitions

Potential contaminant migration pathways

Overland Transport = Uncontrolled sheet flow of water and other material to the river from a site.

Bank Erosion = Erosion of material within the sloping bank areas of the site to the river.

Groundwater = Groundwater plumes or discharges to the river either via seeps or through preferential pathways.

Stormwater = Stormwater discharges to the River that originates from a pipe (permitted or unpermitted).

Overwater Activities = The storage or use of hazardous substances over the water (i.e., storage tanks on docks, permanent work activities conducted over water), that if released would be a ptotential current or future source of contamination to the river. Pipelines and other conveyance systems are not considered in this category. Releases from these types of systems need to be reported to the state Oregon Emergency Response System (OERS) system.

Other = Pathway examples: wastewater discharges, air deposition, direct discharges.

Priority levels for pathways and sites

High = High priority pathways and sites are those where a complete contaminant migration pathway exists and the upland source is significantly impacting the river or poses a significant and imminent threat to the river based on initial evaluation of key source control prioritization factors (listed on p. 4-3 JSCS). A primary consideration is that one or more media (soil, water, air) significantly exceed applicable Screening Level Values (SLVs) at the point of discharge to the river (e.g., water at the end of a discharge pipe, or soil or material at the riverbank) or the most reliable and cost-effective data point (e.g., groundwater measured at the shoreline), or where a bioaccumulative chemical is detected at concentrations significantly above the SLV. In addition, if an upland source is violating DEQ narrative water quality criteria for the Willamette River, the site may be considered a high priority. High priority sites are expected to move forward with aggressive source control measures without delay or be subject to enforcement action.

Medium = Medium priority pathways and sites are those where a complete contaminant migration pathway exists and the upland source is impacting the river or poses a significant and/or imminent threat to the river based on an initial evaluation of key source control prioritization factors (listed on p. 4-3 JSCS). A primary consideration is that one or more media exceed applicable SLVs, but not significantly, at the point of discharge to the river, or where a bioaccumulative chemical is detected at concentrations above the SLV. Although exceedance of SLVs does not necessarily indicate a site poses a significant and/or imminent threat or needs to immediately implement source control measures, it does indicate that the site may pose a threat to human health or the environment and that additional evaluation may be needed to determine if source control measures are required to prevent, minimize or mitigate the migration of hazardous substances to the river. If the site exceeds one or more SLVs, the need for further characterization or for implementation of source control measures will be based on a site-specific weight-of-evidence determination. Medium priority sites are expected to perform a weight-of-evidence evaluation to determine if source control measures are required.

Low = Low priority pathways and sites are those where upland data indicate, based on an initial evaluation of key source control prioritization factors (listed on p. 4-3 JSCS), that the site likely poses a low threat to the river (e.g., concentrations are near or below SLVs) or where DEQ, in consultation with EPA, may issue an upland "No Further Action" (NFA) determination or lower the State's priority of the site for further upland investigation or remedial action under DEQ's cleanup authority. Source control measures will not be required at low priority sites unless determined necessary by the results of the Portland Harbor RIFS or ROD.

p High = DEQ's preliminary determination is that this is likely a high priority pathway or site based on available information; pending formal source control evaluation determination.

p Med = DEQ's preliminary determination is that this is likely a medium priority pathway or site based on available information; pending formal source control evaluation determination.

p Low = DEQ's preliminary determination is that this is likely a low priority pathway or site based on available information; pending formal source control evaluation determination.

Shading

= Upland Source Control Decision has been completed for the specified pathway at this site.

DEQ Milestone Report Information about the Source Control Table

Pick Lists

Pick lists are used to faciliate the addition of information to the spreadsheet. A pick list is a list that can be used by the project manager to select an entry from a group of designated choices. Pick lists will appear as a pull down menus in the lower right corner for the following fields: Project status, Status of SCE, Schedule for Completing SCE, Completeness of pathway to the river, Pathway priority level, Site priority level, Source control alternatives evaluation and schedule, Selected SCMs, Mass or volume of contaminants controlled, and Operation and maintenance requirements. The pick lists for these fields are shown below.

Project Status
PA
XPA
RI
FS
RD / RA
NFA
PPA
CNFA

Status of SCE
Ongoing
Not Started
Pending EPA
Review
Completed
N/A

ľ	Schedule for
	completing SCE
ľ	
L	No current schedule.
ı	SOW under
	development, due (type
ľ	
	SOW currently being
	implemented.
Ī	
	(PM description of
	schedule)
	N/A

	. 1
1	Alternatives evaluation
Pathway determination	and schedule
	no alternatives
Pathway is complete	evaluation needéd
Insignifcant pathway; no	schedule for completing
actions recommended	draft evaluation report:
	schedule for completing
Waiting on SCE to be	final evaluation report:
completed	(m/y)
No known current sources (spills will be reported to OERS)	evaluation to be part or upland FS; schedule for completing draft/final: (m/y)
(PM description of source	alternatives evaluation
and pathway)	completed (m/y)
N/A (use when the pathway	

Priority level
High
Medium
Low
p High
p Med
p Low
to be determined
none (use if SCE determined the pathway to be incomplete)

Status of	f EPA "Partners" Review of SCA Decision
EPA	reviewed and commented.
Review	Pending. SCA submitted (type date).
SCA to	be submitted on (type date).
	Comment period (type date) to (type date).
SCA sub	omitted to EPA (type date). No comments.
	N/A

Status of EPA review of SCE
decision
Review pending; SCE submitted (m-y)
Waiting on SCE completion (m-y)
SCE to be submitted to EPA on (m-y)
To be determined
SCE submitted to EPA (m-y); no comments
N/A

L	Selected SCMs
N	o SCM needed
	
(PI	M description of
	SCMs)
	•
	N/A
	Operation and
	Maintenance
1	requirements
	· • • · · · · · · · · · · · · · · · · ·
per	riodic inspection
an	d maintenance
	effectiveness
	monitoring
site	use restrictions
_	M description of
٠,	ration/maintena

nce requirements) none

does not exist at the site)

Mass/Volume of contaminants controlled cubic yards of soil removed square feet of area capped linear feet of plume controlled at riverbank linear feet of riverbank stabilized gallons of product recovered (PM description of mass/volume/area controlled)

DEQ Milestone Report Information about the Source Control Table

Acronyms & Abbreviations

<u>×</u>	MDDIEVI	auons
	Agr	Agreement
	AOC	Administrative Order on Consent
	AS/SVE	Air sparge soil vapor extraction
	AST	Above ground Storage Tank
	BMPs	Best Management Practices
	BRA	Baseline Risk Assessment
	CNFA	Conditional No Further Action
	ECSI	Environmental Cleanup Site Information
	FS	Feasibility Study
	GW	Groundwater
	IGA	Inter-Governmental Agreement
	JSCS	Joint Source Control Strategy
	NA	Not Applicable
	NFA	No Further Action
	OF	Outfall
	p&t	Pump & Treat
	PA	Preliminary Assessment
	PH	Portland Harbor
		Portland Harbor Agreement - a formal agreement for a RI and SC
	PH Ltr A	Agr Portland Harbor Letter Agreement - an initial contract covering DEQ oversight costs
		and limited investigation and cleanup activities
	PM	Project Manager
		Prospective Purchaser Agreement
		Remedial Design/Remedial Action
	RI	Remedial Investigation
	RI/FS	Remedial Investigation/Feasibility Study
	SC	Source Control
	SCD	Source Control Decision
		Source Control Measure
	SLV	Screening Level Value
	SOW	Scope of Work
	SVE	Soil Vapor Extraction
	TCA	Trichloroethane
	UST	Underground Storage Tank
	WO	Waiting on

XPA Expanded Preliminary Assessment DEQ Project Managers' Phone Numbers

Jim Anderson	(503) 229-6825
Dana Bayuk	(503) 229-5543
Tom Gainer	(503) 229-5326
Dan Hafley	(503) 229-5417
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Ken Thiessen	(503) 229-6015
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Dave Lacey	(503) 229-5354
Mike Romero	(503) 229-5563
Jennifer Sutter	(503) 229-6148
Karen Tarnow	(503) 229-6843
Jim Orr	(503) 229-5039
Scott Manzano	(503) 229-6748

Site Location Key

Link to map of sites:

http://www.deq.state.or.us/lq/cu/nwr/PortlandHarbor/docs/PortlandHarborMap.pdf

Site Name	AKA - alternate site names	ECSI# (primary)	ECSI # (secondary)	River Mile	Address
Wilhelm Trucking		69		9.3	3250 and 3074 NW St. Helens Road
McCall Oil		134		7.8	5550 NW Front
NW Pipe Company		138		3.9	12005 N Burgard
ACF Industries	American Car Foundry, EMC Industries - ACF Car, Pacific Metal Substations, Inc., Richmond Tank Car and Manufacturing Co.	794		3.6	12160 NW St Helens
Air Liquide	Schnitzer Investment - Doane Lake	395		7.2	6529 NW Front Ave.
Anderson Brothers		970		8.9	5275 & 5315 NW St.
Atofina	Arkema, Elf Atochem North America, Pennwalt Chemical Corp.	398		7.2	Helens Road 6400 NW Front
Galvanizers Company	COID.	1196		9.6	2406 NW 30th Ave.
BP Terminal 22T	ARCO, ARCO Linnton Terminal, BP Atlantic Richfield Company	1528	2373, 2351	4.8	9930 NW St Helens
Brix Maritime	Foss Maritime Co., Knappton Corp.	2364		5.5	9030 NW St Helens
Schnitzer Burgard Industral Park	00/0.	5324	 	3.8	12005 N Burgard
Schnitzer Steel	Schnitzer Burgard Industral Park	2355		4	12005 N Burgard
Lakeside Industries	GIN	2372		8.4	4850 NW Front Ave.
Calbag Metals	ACME Trading and Supply	2454	2425	8.5	4927 NW Front
Chevron Asphalt	7 town 2 Trading and Cappit	1281	2423	8	5501 NW Front
Christensen Oil	HAJ, Incorporated	2426		8.9	
City of Portland Outfalls	Tivito, most porated	2425		3.5 to 9.2	3821 NW St Helens various
Columbia American Plating	T	29		9.3	3003 NW 35th Ave.
Con-Metco		3295		2.8	
	<u> </u>	0200		2.0	3940 N Rivergate 3000 NW Saint Helens
Container Management]	4784	ł	9.3	Rd.
Container Recovery	 	4015		8.8	
Crawford Street Corp	Columbia Forge & Machine Works, Lampros Steel - 8524 N Crawford, TLS Steel - 8514				3900 NW Yeon
Esco Landfill	N Crawford	2363		6.3	84248 N Crawford 14444 NW Gilliam Loop
	ExxonMobil Bulk Plant,	4409	-	NA	Rd.
Exxon Mobil	ExxonMobil Terminal, Mobil NuStar Oil Bulk Plant - St. Helens RD, Shore Terminals, ST Services Olympic Pineline	137		5.1	9420 NW St Helens
Fred Devine	Pacific Coast Environmental, The Marine Salvage Consortium Inc	2365		8.3	6211 N Ensign
Freightliner (Parts Manufacturing	a.k.a. Freightliner Truck			5.5	OZ I I II LIIBIGII
Plant)	Manufacturing Plant II	115	ľ	9.2	5400 N Basis
reightliner (Truck Plant)	The state of the s	2366		8.3	5400 N Basin 6936 N. Fathom

Site Location Key

Link to map of sites:

http://www.deq.state.or.us/lq/cu/nwr/PortlandHarbor/docs/PortlandHarborMap.pdf

Site Name	AKA - alternate site names	ECSI # (primary)	ECSI # (secondary)	River Mile	Address
Front Ave LP	CMI Northwest, Hampton Lumber Sales, Glacier NW (former Lone Star), Tube Forgings of America	1239	2378	8.2	4950, 5034 & 5200 NW
Galvanizers Company	Foldidos di America	1196	2425	9.6	2406 NW 30th Ave.
Gasco	NW Natural, Koppers Co Portland, Pacific Northern Oil Co	84	183	6.4	7900 NW St Helens
Gasco/Siltronic Corp.	Siltronic Corporation, Walker	183	84	6.6	7700 NW Front
GE Decommissioning	Siltronic	4003	2425	9.5	2727 NW 29th Ave.
Georgia Pacific Linnton	Georgia-Pacific / Western Wood Prods Manuf Divn, Georgia-Pacific West, Morge Bros	2370		3,5	12222 NW Marina
Goldendale Aluminum	Ash Grove Cement, Columbia Aluminum, Martin Marietta, Golden NW Aluminum	2440		10.3	2600 N River
Gould Electronics	NL Industries	49		7.5	5909 NW 61st Ave.
GS Roofing	Bird & Son, Certainteed Corporation, Fibreboard Corporation	117		7.5	6350 NW Front
Guilds Lake RR Yard	Burlington Northern Santa Fe Railroad Lake Yard, Guilds Lake Railyard, Kleen Blast Abrasives, Lake Yard Portland Terminal Railroad Guilds Lake Yard	100		9	3500 NW Yeon
Gunderson		1155	2372, 2425	9.0	4350 SW Front
Mt. Hood Chemical	Former Chemical Warehouse RI/SC	81		8.5	4444 NW Yeon
Jefferson Smurfit	Burgard Industrial Park	2371	†	3.7	9930 N Burgard
Kinder Morgan	GATX, GATX Linnton Terminal, GATX St. Helens Road Facility	1096		4.2	11400 NW St Helens
Lakeside Industries		2372	1155	8.4	4850 NW Front
Linnton Oil Fire Training Grounds		1189	1	3.6	NW Marina Way
Linnton Plywood Mar Com Marine (N Parcel)	L & S Marine, Mar Com Marine Ways, Marine Machine Works (Former), Nichols Marine Ways Inc., Riverside Lumber Co.	2373		5.6	8790 N Burgard
Mar Com (S Parcel)	St. Johns Langley LLP, Brix (current owner), L & S Marine, Mar Com Marine Ways (former owner), Marine Machine Works (Former), Nichols Marine Ways Inc., Riverside Lumber Co.	2350		5.8	8790 N Burgard
Marine Finance	Hendren Tow Boat, REH Inc., Riverside Industrial Park, Advanced American	2352		5.8	8444 NW St Helens
McCall Oil	Great Western Chemical, Quadra Chemicals	134		7.8	5550 NW Front 6900 N. Edgewater
McCormick & Baxter		74		7	Street
NW Pipe	Northwest Pipe Company	138		3.9	12005 N Burgard
Oregon Steel Mills	Gilmore Steel Corp Rivergate	141		2.2	14400 N Rivergate
Owens-Corning Fiberglass	Trumbull Asp, Kingsley Park, Linnton Planing Mill,	1036		3.8	11444 NW St Helens
Pacificorp	Paramount Petroleum Site	5517		<u>3.6</u> 11.6	various

Site Location Key

Link to map of sites:

http://www.deq.state.or.us/lq/cu/nwr/PortlandHarbor/docs/PortlandHarborMap.pdf

Site Name	AKA - alternate site names	ECSI # (primary)	ECSI # (secondary)	River Mile	Address
Paco Pumps		146		9.6	2551 NW 30th
PGE Harborton		2353		3.2	NW Marina Way
PGE Forest Park		2406		8.5	4400 Block NW St. Helens Road
PGE Station E		3976		10.4	2635 NW Front Ave.
Port of Portland Auto Storage Area (ASA)	Toyota	2642		5.0	10400 Lombard
Portland Shipyard	Cascade General, Swan Island Upland Facility, North Channel Ave Fabrication, Berth 311	271		8.4	Swan Island
Premier Edible Oils	C & T Quincy Foods (SEE ECSI 2355), Schnitzer Investment Corp.	2013	2355	3.6	10400 N Burgard
Rhone Poulenc	East Doane Lake, Aventis Crop Science, Rhone Poulenc Agricultural Company	155		7	6200 NW St Helens
Riverscape	Port of Portland T1S	2642		10.9	2100 NW Front
Schnitzer Steel	Schnitzer Steel Part of Industrial Park DEQ Site	2355		3.8	12005 N Burgard
Schnitzer Burgard	International Terminals, North Burgard Industrial Park	5324		3.8	12005 N Burgard
Schnitzer Kittridge	Asset Recovery, Schnitzer Investment Corp	2442		8.3	4959 NW Front
Shaver Transportation		2377		8.4	4900 NW Front

Site Location Key

Link to map of sites:

http://www.deq.state.or.us/iq/cu/nwr/PortlandHarbor/docs/PortlandHarborMap.pdf

Site Name	AKA - alternate site names	ECSI # (primary)	ECSI # (secondary)	River Mile	Address
Siltronic Corp. TCE Investigation	Siltronic Corporation, Walker Siltronic	183		6.5	7200 NW Front
Sulzer Pump	Bingham International, Bingham Willamette, Sulzer Pumps, Inc.	1235		10.4	2800 NW Front
Terminal 1 North	BES- Nicolai Shaff	3377		10.6	2200 NW Front
Terminal 2	220 11100101 01121	2769	†··	10	3556 NW Front
Terminal 4 Slip 1	IRM, Cargill	2356	1	4.3	11040 N Lombard
Port of Portland - Terminal 4 Slip 3	Hall-Buck Marine Inc., Oregon Terminal Company (OTC), OTC Gearlock Maintenance Facility (Former), Quaker State Oil Co., UPRR - Product Transfer Pineline (Former)	272		4.6	10400 Lombard
Terminal 5	Oregon Steel Mills Slag Pile, Port of Portland - Terminal 5, Blue Lagoon	1686		1.5	15540, 15550, & 15560 N Lombard
TexacoTermina!	Equilon, Shell, Texaco Product Pipeline	169	2117	8.7	3800 NW St Helens
Time Oil (Northwest Terminal)	Bell Terminal	170		3.4	10350 Time Oil Rd
Triangle Park (N PDX Yard)	Environmental Services - N Portland Yard, Sakrete of the Pacific Northwest, Inc., Western Pacific Dredging/Drilling/Piledriving/e tc., Willamette-Western Company, World Security	277		7.5	5828 N Van Houten
UPRR Albina	Albina Rail Yard, Union Pacific RR - Albina Yard	178		10.3	2745 N Interstate
UPRR St Johns Tank Farm	Union Pacific RR - St. Johns Tank Farm, UPRR - Product Transfer Pipeline (Former), UPRR Fuel Loading Facility (Former), Port of Portland	2017		4.6	6908 N Roberts
uscg	US Coast Guard - Portland Station	1338		8.2	6767 N Basin Ave.
US Moorings		1641		6.2	8010 NW St. Helens Rd.
Willamette Cove	-	2066		6.8	Foot of N Edgewater
Willbridge	Kinder Morgan, Chevron, ConocoPhillips, GATX - Willbridge Terminal, Tosco - Willbridge Terminal, Unocal - Willbridge Terminal	1549		7.7	Front Ave & NW Doane
Vanwater and Rogers	Univar	330		9	3950 NW Yeon Ave.
Willamette Cove	 	2066		6.8	Foot of N Edgewater
Calbag Metals		5059		10.1	2495 Nicholai St.
US Navy Reserve		5109		8.2	6735 North Basin Avenue
Shore Terminals		5130		5.4	9400 NW Saint Helens Rd.

Status of High Priority Sites

	Site	River Mile	High Priority Pathway	Source Control Evaluation	Selection of Source Control Measure	Implementation of Source Control Measure	Remarks
1	Oregon Steel	2.2Ē	Bank erosion	Complete	-Currently considering re-design incorporating bioengineering based largely on satisfying ESA concerns		
	Mills		Stormwater	Complete	-Complete	-End-of-pipe treatment system operating since summer '07, -System expanded in 2008, -Loading evaluation to be conducted in 2010-11 water ye	
2	City Stormwater Outfalls	Various	Stormwater	Ongoing	-SCMs being selected at individual upland sites	-SCMs being implemented at individual upland sites -Treatment at end of 3 OF basins in '95-'96 -Partial/complete diversion of stormwater to WWTP/POTW in 15 basins (work to be completed by 2011) -Ongoing City-wide programmati source control efforts (see Section 2.1)	identify up-pipe sources
3	Premier Edible Oil	3.6E	Groundwater	Ongoing (to be .determined)	-DEQ is requring a focused feasibility study (FFS) to be performed to support selection o SCM addressing NAPL and groundwater	•	-Outstanding nature and extent issues (i.e., SCE) to be addressed in FFS
4	Schnitzer Burgard Industrial Park	3.8E	Stormwater Overland	Ongoing (TBD) Ongoing			-SCE complicated by property ownership -SCE complicated by
			Transport	(TBD)			property ownership
5	Schnitzer Steel	4.0E	Stormwater	Ongoing (4th Qtr '11) Ongoing	-Stormwater capture, re-use, end-of-pipe treatment sytem installed in 2009 -Asphalt berm constructed in 2009 along 925'		-Stormwater management system to be expanded
			Transport	(4th Qtr '11)	of landward edge of Schnitzer dock to help prevent overland runoff to slip		
6	Kinder Morgan (former GATX)	4.2W	Groundwater	Ongoing (1st Qtr '11)	-GW pump & treat system in-place -SCE designed to enhance existing interim GW CSM -FFS for barrier wall being prepared		
7	BP/Arco	4.8W	Groundwater	Complete	-Barrier wall & enhanced GW pump & treat system in-place -Riverbank & nearshore sediment removal completed fall '08	-RP started SCM in summer '07 Fish Window & completed work in fall '08 removing 16,000cy of contaminated soil/sediment.	
8	Exxon/Mobil	5.1W	Groundwater	Complete	Complete	Complete	-SCM selected in 1997 DEQ ROD. Onging SCM. -Further SCMs (enhancement are being studied
9	MarCom South	5.8E	Overland Transport	Currently reviewing revised SCE			-RP removed sand blast grit piles in fall '08 as part of "housekeeping" effort
10	Gasco	6.4W	Groundwater	Complete	-SCM Eval report (FFS) submitted 10/07 -Draft interim Design Report submitted 11/09 -Currently in Formal Dispute Resolution regarding next step in SCMs		-See Section 5.0 of text
			Bank erosion	Complete	-Coordinate with in-water Early Action		In-water Early Action AOC wit EPA signed 9/09
11	Gasco (Siltronic)	6.6W	Groundwater	-SCE received '09, preliminarily reviewed & deferred	-SCE FFS for Gasco considers this pathway		-Gasco MGP waste on the Siltronic property
12	Siltronic	6.5W	Groundwater	Complete	-SCM Eval report (FFS) submitted 10/07 -Enhanced in-site bioremediation (EIB) SCM applied fall '08EIB supplemental work in '09 & '10	-EIB also applied in source area -SCM effectiveness monitoring ongoing	··· -
13	Rhone Poulenc	7.0W	Groundwater	Ongoing (4th Qtr '10)	-RP recently completed long-term pilot testing for potential pump & treat SCM.	Ungung	Comprehensive SCE Report
14	Arkema	7.2W	Groundwater	Complete	-Revised FFS for barrier wall & hydraulic received 2008DEQ selected wall/extraction well SCM in 200	Arkema submitted a draft design for the well/wall SCM in 2010. DEQ provided comments. -Well/wall SCM is in final design -SCM scheduled to begin 2011	due October 2010 -RP implemented series of pilot & full-scale SCMs
•			Stormwater	Complete	-Stormwater SCM in design & permitting	SCM construction scheduled to begin 2011.	
			Bank erosion	Complete			To be integgrated into in- water Early Action Ongoing GW pump & treat
15	Wilibridge	7.7W	Groundwater	(except for deep GW)	Complete	Complete	SCMs Further SCM ehancements are being studied
16	Gunderson	9.0W	Groundwater	Ongoing (1st Qtr '11)			Ongoing GW pump & treat SCM in Area 1
			Stormwater	Ongoing (2nd Qtr '11)			
			Bank erosion	Ongoing (1st Qtr '11)			
			Overland runoff	-TDB, pending DEQ review of RI Report			

Notes: 1) Date in parentheses is expected date of completion 2) Source Control Evaluation (SCE)

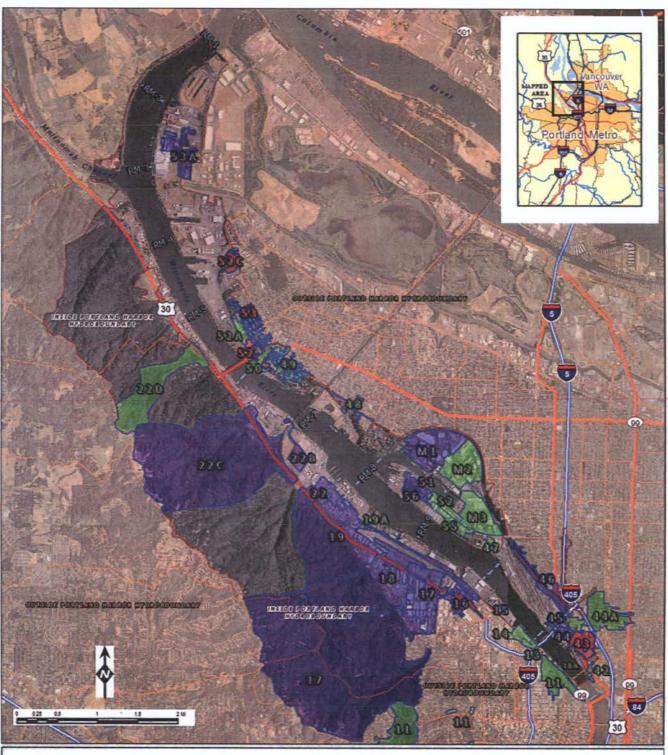


Figure 1: Status of Source Identification in City Stormwater Basins

(August 2010)

Ease imagery 2009 from UDSA NAIP photography.

Outfalls, outfall basins, and hydro boundary from City of Portland Eureou of Environmental Services.

Touches from Maters 211.6.

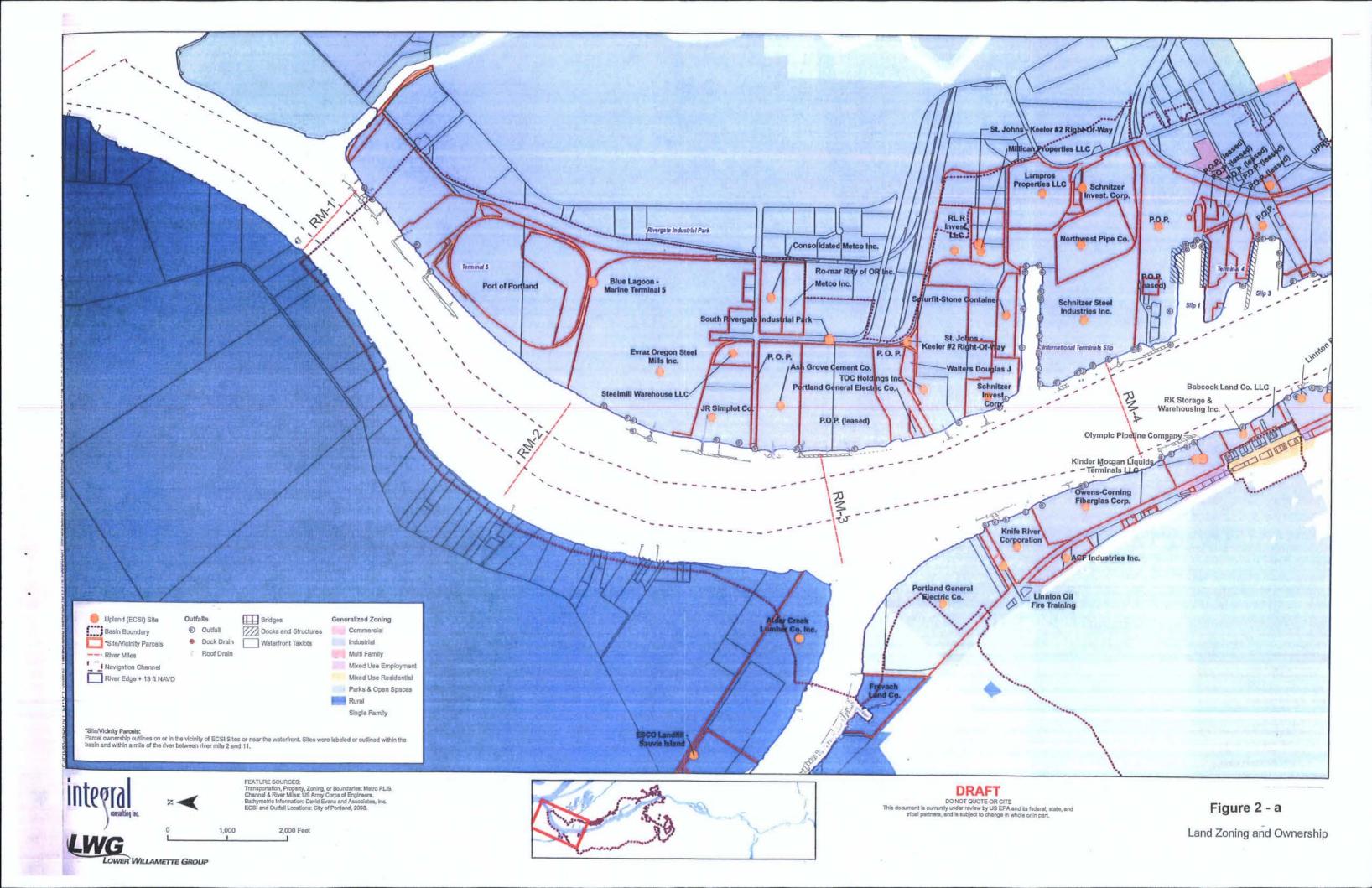
Outfall basin status of source identification

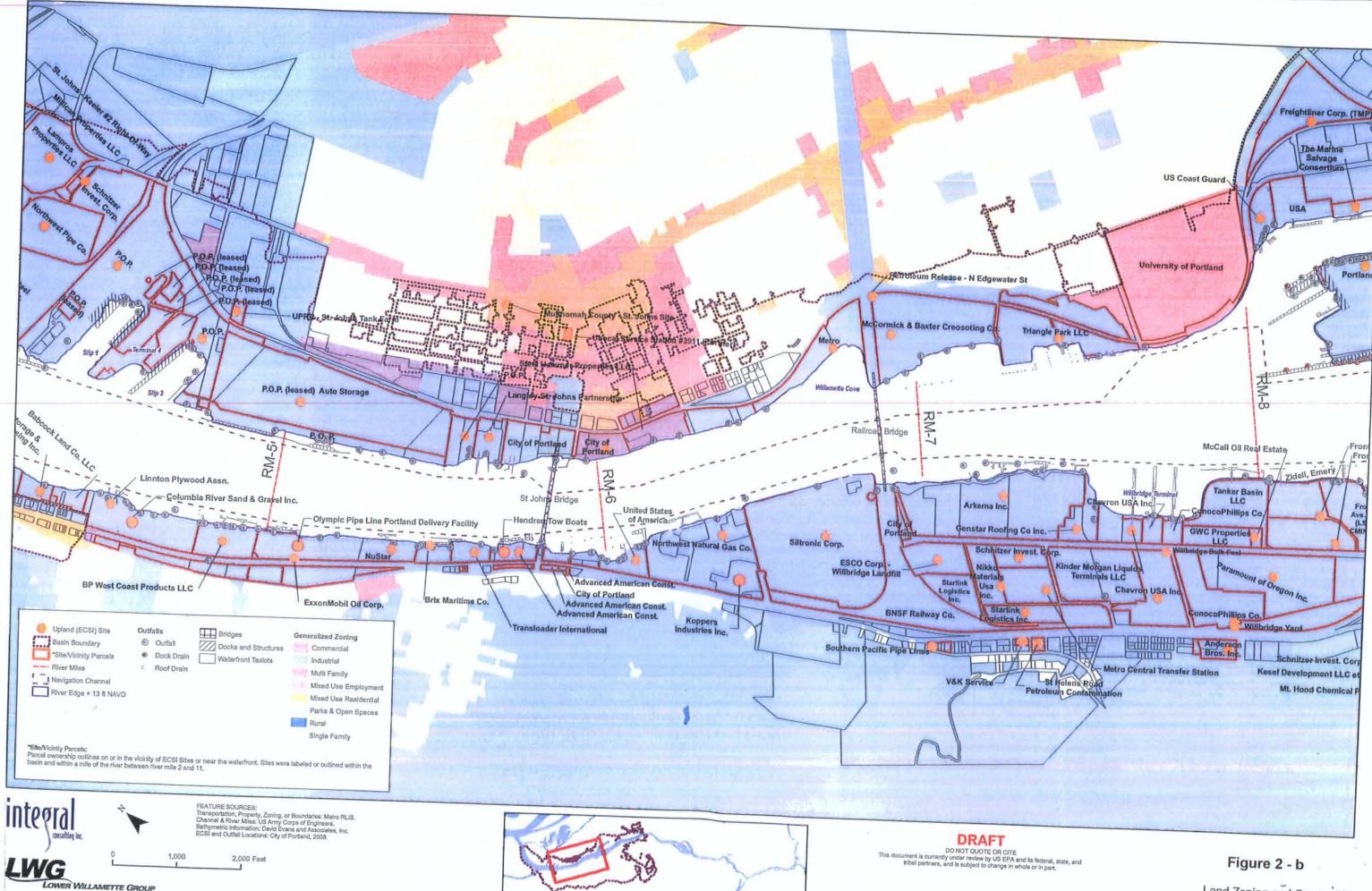
No Significant Sources in Basin and insignificant or incomplete Pathusy

Bourse Identification in Basin is Complete

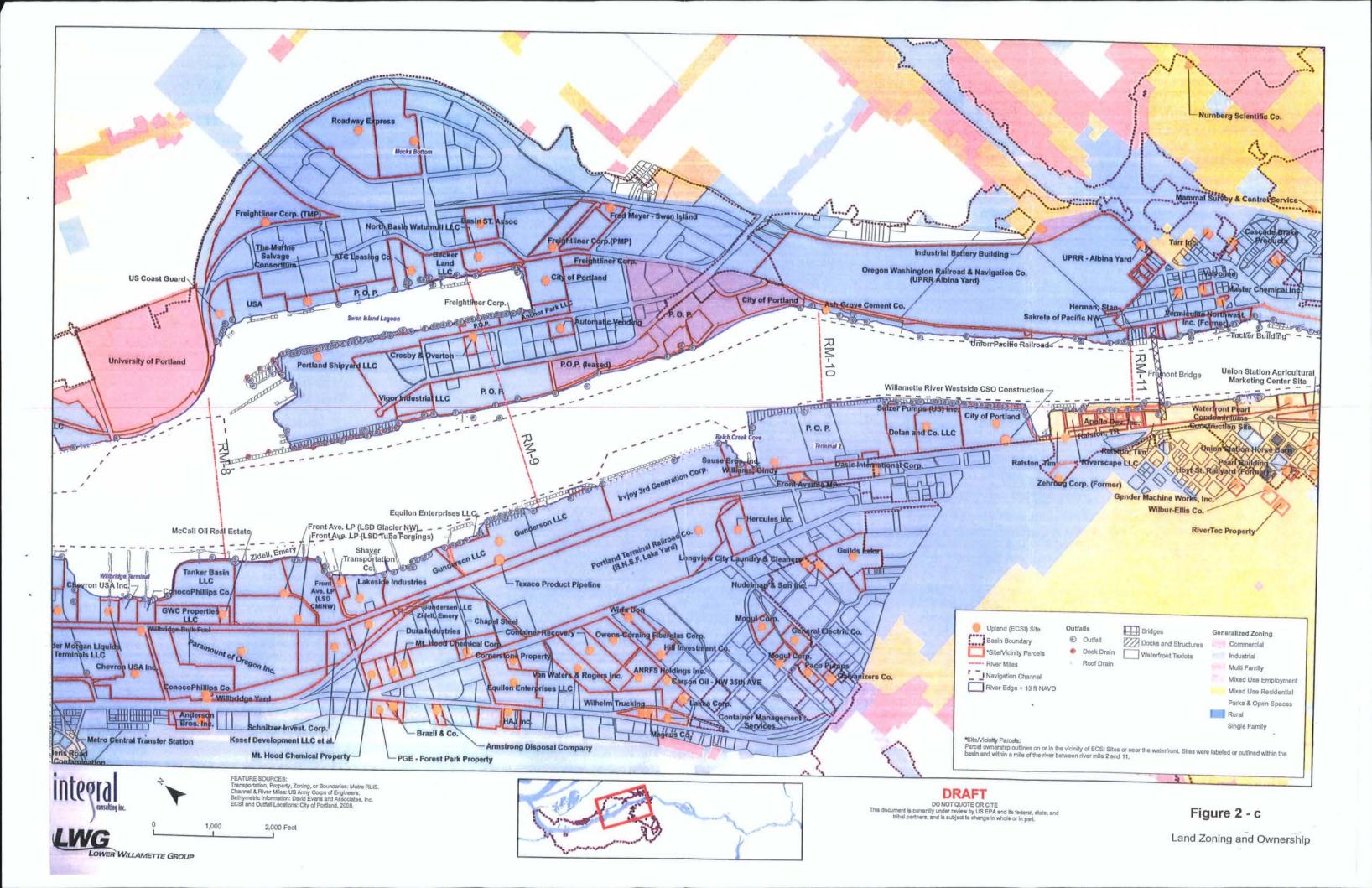
Additional Source Identification Needed or May be Needed in Basin







Land Zoning and Ownership



Update on Stormwater Source Control at the Portland Harbor Superfund Site

September 2010

Prepared by the Oregon Department of Environmental Quality



This document is posted on DEQ's web page at http://www.deq.state.or.us/lq/cu/nwr/PortlandHarbor/jointsource.htm

If you have questions or comments regarding the information in this report, please direct them to Karen Tarnow, Portland Harbor Stormwater Coordinator at DEQ (503-229-5988).

<u>tarnow.karen.e@deq.state.or.us</u>

1.0 Introduction

DEQ is responsible for controlling upland sources of contamination to Portland Harbor on a schedule that ensures cleanup of the river can proceed with minimal risk of recontamination. This document describes DEQ's strategy for achieving this objective for the stormwater pathway, the status of stormwater source control at upland sites and the timeline for completing this work. In addition, Attachment A describes a tool DEQ developed for evaluating stormwater data.

1.1 Potential Sources of Stormwater Contaminants

There are two types of contaminant sources at upland sites. One type of source is contaminated media (e.g., soil, groundwater, pavement, etc.) that results from historical releases of hazardous substances. This is sometimes called *legacy contamination*. Legacy contamination can be caused by legacy *contaminants* that have been banned for general use, such as PCBs and DDT, but can also be caused by contaminants currently in use, such as various metals and petroleum-related substances. We use the term "legacy" because most often this contamination resulted from past practices and/or releases.

The other type of contaminant source is a result of the day-to-day activities that take place at a site. Many kinds of activities have the potential to result in minor releases of contaminants, such as zinc released by the wear and tear on tires and brake pads, phthalates off-gassing from paints and PVC piping, and petroleum products in drips of oils, greases and fuels used for vehicles and machinery.

Effective stormwater source control is based upon an understanding of the types and sources of contamination at a site. This information is used to determine the appropriate tools to prevent or minimize the potential for contaminants to become entrained in stormwater runoff.

1.2 Preventing Stormwater Contamination

There are many programs and efforts underway that are designed to eliminate or control contaminant sources and minimize the potential for stormwater to come into contact with contaminants. These include stormwater permits and implementation of best management practices (BMPs), hazardous waste regulations, toxics use reduction initiatives, the City of Portland's Stormwater Management Manual and Green Streets initiatives, etc. These programs do the lion's share of the work of preventing stormwater contamination, and have been widely practiced for years and even decades in some instances. As a result, present-day stormwater discharges are *much* cleaner than in years past.

That said, there are certain sites where a higher level of investigation, regulation and oversight may be needed to achieve source control objectives. This is the focus of DEQ's comprehensive stormwater strategy for Portland Harbor.

2.0 DEQ's Comprehensive Stormwater Strategy for Portland Harbor

DEQ's objectives for stormwater source control are (1) to identify and address stormwater discharges containing elevated contaminant concentrations, and (2) to ensure future stormwater discharges will not recontaminate harbor sediments. DEQ draws upon its Cleanup and Water Quality authorities to accomplish these objectives. This is how they are being applied:

2.1 Identify and address contaminated stormwater discharges¹

DEQ's Cleanup Program identifies and addresses sites with contaminated stormwater discharges to minimize the potential for contaminants to migrate to the river via the stormwater pathway. This approach involves consideration of several lines of evidence to determine where source control is needed and when it has been achieved. These procedures are described in DEQ's Guidance for Evaluating the Stormwater Pathway at Upland Sites (http://www.deq.state.or.us/lq/cu/stmwtrguidance.htm).

The guidance is currently being updated to clarify certain policies and procedures and to include a screening tool for stormwater data (see Attachment 1 for a description of the tool). The screening tool is used to help distinguish stormwater containing elevated contaminant concentrations from stormwater that represents "typical" industrial runoff. Elevated contaminant concentrations are an indication that contamination may be present at the site and that additional investigation and source control may be needed.

DEQ will issue a Stormwater Source Control Decision (SCD) when it determines that contaminant sources at the site have been controlled as necessary to minimize potential for contaminant migration to the river via stormwater discharge, and that the resulting discharge is not likely to contaminate in-river sediments.

Stormwater is a unique contaminant pathway for the Cleanup Program to address because releases of certain types of contaminants are *expected* to continue, at some level, due to the nature of industrial operations and other human activities. Whereas the Cleanup Program typically focuses on contaminated media (e.g., soil, sediment, groundwater), these ongoing, incidental releases are commonly managed through Water Quality programs and permits to ensure that stormwater discharges don't result in unacceptable environmental impacts.

For this reason, a Stormwater SCD from DEQ's Cleanup Program does not confer the same degree of finality as a SCD for other contaminant pathways (e.g., groundwater, bank erosion) or a No Further Action (NFA) determination. There is an expectation that appropriate stormwater management measures will continue to be implemented and that water quality regulations and programs will be applied as necessary to ensure adequate measures are being taken to achieve

¹ Some industrial sites operate under a stormwater permit that requires certain stormwater control measures. However, these permits do not address all of the contaminants that are most problematic in Portland Harbor and may not be sufficient to address the Portland Harbor cleanup goals. Therefore, a stormwater permit does not necessarily preclude the need for additional evaluation and source control.

environmental objectives. Thus, a Stormwater SCD from the Cleanup Program should be considered a milestone in the stormwater source control process rather than an endpoint.

2.2 Manage future stormwater discharges with Water Quality programs and permits

As mentioned above, there is a wide array of regulatory and non-regulatory programs that directly or indirectly help to minimize the potential for stormwater to come into contact with contaminants. Before cleanup of the river can proceed, there needs to be a high degree of confidence that these efforts, in total, sufficiently minimize the potential for stormwater discharges to recontaminate the harbor sediments. This requires an understanding of the load of contaminants being discharged into the river in spite of all the source control and stormwater management efforts, and the fate and transport of contaminants in the river.

This evaluation will depend in part on modeling and other analyses being conducted as part of the Portland Harbor Remedial Investigation/Feasibility Study (e.g., loading evaluation, modeling results, cleanup goals). Much of this information should be available, at least in draft form, by spring 2011. DEQ is also looking into simple recontamination models to complement these efforts.

If the evaluation determines that stormwater poses a recontamination risk, one or more of the following things may happen.

- a) DEQ could revisit certain SCDs and/or expand its source control evaluation efforts to include additional sites (i.e., those currently considered to be lower priority sites) with the goal of "ratcheting back" on the contaminant load being discharged into the river.
- b) DEQ could issue a more stringent industrial stormwater general permit², require additional facilities to obtain coverage under the general permit, and/or issue individual stormwater permits to facilities where a more protective permit is necessary to prevent recontamination.
- c) The City could improve or expand its stormwater pollution prevention efforts to better address the sources or drivers of recontamination risk.

The results of the evaluation will help DEQ determine which of these actions – or potentially other actions not listed above – are the most appropriate measures to take to minimize the recontamination risk. If additional actions are needed, the objective would be to have them implemented before or shortly after EPA issues the Record of Decision for Portland Harbor. After the Portland Harbor Record of Decision (ROD) is issued and Remedial Design begins, stormwater discharges within or adjacent to Sediment Management Areas may undergo additional scrutiny. If existing controls are found to be inadequate to prevent recontamination,

² Certain industry types are required to obtain an Industrial Stormwater General Permit from DEQ (aka the 1200Z permit, administered in Portland by the City's Bureau of Environmental Services). The permit creates a mechanism for providing ongoing oversight of stormwater management practices and evaluating the effectiveness of these practices. If the discharge cannot be adequately controlled by the 1200Z general permit, DEQ can require a facility to obtain a customized "individual" stormwater permit. Information on these permits and the industries required to obtain a permit can be found here: http://www.deq.state.or.us/wq/stormwater/industrial.htm DEQ's Water Quality Program is in the process of revising the 1200Z and expects to propose a revised permit in summer 2011. Once this permit is drafted, DEQ can begin to evaluate its effectiveness for Portland Harbor.

site-specific stormwater treatment technologies and/or customized stormwater permits may be required at sites of concern.

3.0 Timeline for Accomplishing Stormwater Source Control Objectives

Figure 1 shows an approximate timeline for DEQ to accomplish its source control objectives. With the possible exception of a small number of complex sites, DEQ expects to have stormwater source control completed by the time that EPA issues the Portland Harbor ROD.

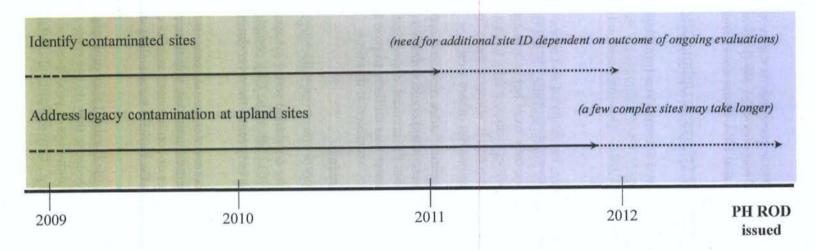
4.0 Status of Stormwater Source Control Efforts at Upland Sites

Table 1 lists all of the sites in DEQ's Environmental Cleanup Site Information (ECSI) database located within the Portland Harbor watershed boundary and indicates the status of stormwater source control efforts at each site as of September 2010. This information is also presented in Figure 2. A few notes regarding this status report:

- A number of ECSI sites shown on the map were investigated and remediated prior to the initiation of work on the Portland Harbor Superfund site. Since these sites did not undergo a stormwater evaluation at the time they were being investigated, DEQ reviewed the file information and adjacent in-river sediment data to determine whether additional evaluation was needed. As a result, some of these "closed" sites were asked to undertake source control evaluations but others were not.
- "Lower Priority Need for SCE To Be Determined" sites include those where there is evidence to suspect that contamination is present and could come into contact with stormwater or stormwater conveyances, but the amount, concentration and/or potential for contaminant migration in stormwater was unlikely to pose a significant threat and therefore additional evaluation is not warranted at this time.
- "Insignificant Pathway" sites include the following:
 - o sites that have no or very infrequent, minor stormwater discharges
 - o sites where stormwater discharges to the combined sewer system (or will discharge to the system by the end of 2011 when the City completes its reengineering of the system) and could only reach the river during an overflow event
 - o sites where there is no evidence that stormwater would come into contact with contamination on the site (e.g., contaminants are subsurface and there is no potential for exposure to stormwater or contaminant migration to the river via infiltration into or advection along the backfill surrounding stormwater pipes)
- A small number of ECSI sites that fall within the Portland Harbor watershed boundary have not been depicted on the map because they do not represent true "sites." Examples include a few spills along highways or pipelines and ECSI sites that represent Study Areas rather than sites (e.g., City of Portland Outfalls; Portland Harbor Sediments).

Figure 1: Timeline for achieving stormwater source control in Portland Harbor.

Controlling sources:



Managing future discharges:

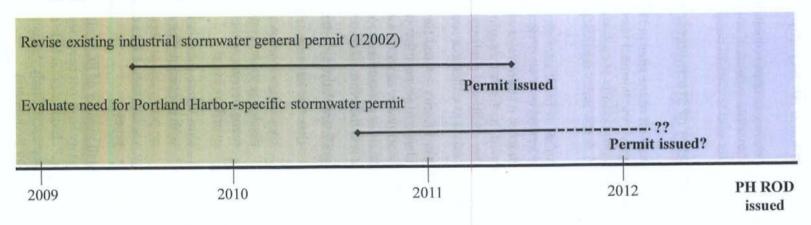


Table 1: Status of Stormwater Source Control Evaluations at ECSI Sites

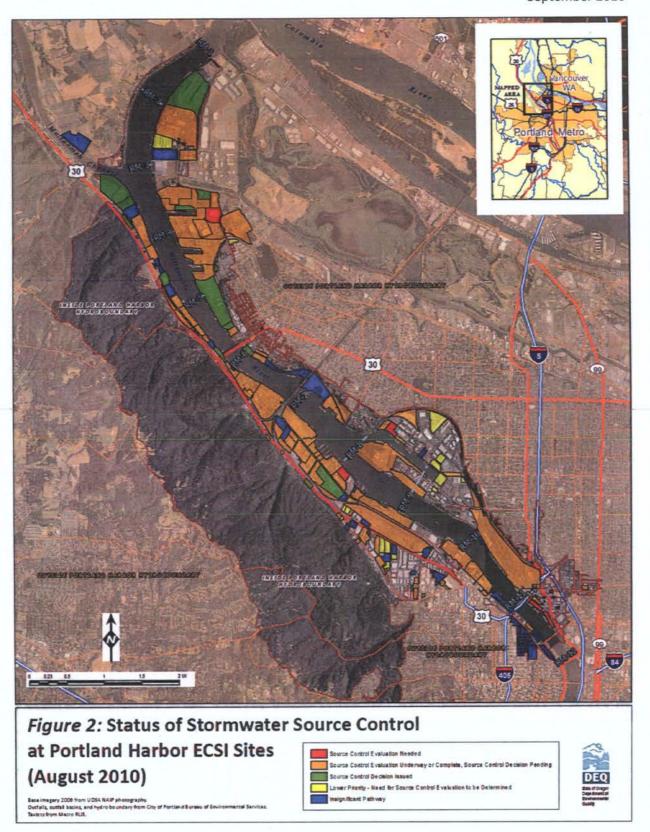
Stormwater SCE Needed (6)	ECSI#
Cargill (Albina River Lots)	9997
Glacier (Albina River Lots)	9998
Glacier NW [Front St.]	2378
Lampros Steel	2441
Ross Island (Albina River Lots)	9999
US Navy And Marine Reserve Center	5109
Stormwater SCE Underway (59)	LID UKT 2 MANUEL
Air Liquide/Schnitzer Investment - Doane Lake	395
Arkema	398
Boydstun Metal Works Inc	2362
Brix/Foss Maritime	2364
Burlington Northern Hub Center And Lake Yard	100
Calbag Metals - Nicolai	5059
Calbag Metals [Front St.]	2454
Centennial Mills	5136
Chevron Products Company	25
Chevron U.S.A., Inc.	1549
Christenson Oil	2426
Columbia American Plating	29
Conoco Phillips Tank Farm	177
Consolidated Metco, Inc.	3295
Container Management Services LLC	4784
Crawford Street	2363
xxonMobile Oil Corporation	137
red Devine Diving & Salvage Inc	2365
reightliner, LLC	115
reightliner, LLC	2366
Salvanizers Company	1196
General Electric Ser Shop	4003
SS Roofing Products, Inc.	117
Sunderson Inc.	1155
inder Morgan Liquid Terminals LLC	1096
oppers Industries, Inc.	2348
akeside Industries	2372
AcCall Oil	134
Metro Central Transfer Station	1398
Mt. Hood Chemical Corporation	81
Iorthwest Natural Gas Company	84

Northwest Pipe Company	138
Oregon Steel Mills - Rivergate	141
Owens Corning - Linnton	1036
PacifiCorp Albina Riverlots	5117
Port of Portland - Terminal 1 North	3377
Port of Portland - Terminal 2	2769
Port of Portland - Terminal 4	272
Port of Portland - Terminal 4, Slip 1	2356
Portland Ship Yard [Cascade General And Port Properties]	271
Premier Edible Oils	2013
Rhone Poulenc	155
Schnitzer Steel	2355
Schnitzer Burgard Industrial Park	5324
Shell Oil Co Willbridge Plant	160
Shore Terminals LLC	1989
Siltronic [Wacker Siltronic Corporation]	183
Sulzer Pumps	1235
Texaco Portland Terminal	169
Time Oil	170
Triangle Park - North Portland Yard	277
Tube Forgings of America, Inc.	1239
Union Carbide Corp. [NW Container]	176
Univar [Van Waters and Rogers]	330
UPRR Albina Site	178
US Moorings [US Army COE]	1641
USCG Dock	1338
Wilhelm Trucking [Magnus]	69
Willbridge Yard	3395
Stormwater SCE Complete; Source Control Decision Pending (3)	MINE
Arco Bulk Terminal	1528
Mar Com, Inc South Parcel	2350
PGE - Forest Park Property	2406
Stormwater Source Control Decision Issued (16)	
ACF Industries	794
Anderson Bros. Property	970
BES Water Pollution Control Facility	2452
Blue Lagoon - Marine Terminal 5	1686
Chevron Asphalt	1281
Jefferson Smurfit Corporation	2371
Linnton Plywood Association	2373
Mar Com, Inc North Parcel	4797

Marine Finance Co.	2352
Oil Fire Training Ground	
Paco Pumps	
PGE - Harborton Substation	
Port of Portland - Terminal 4 Auto Storage	172
Ro-Mar Transportation Systems Inc	2437
SFI, Inc.	5103
UPRR – St. Johns Tank Farm	2017
Lower Priority - Need for Stormwater SCI	E TBD (18)
Ashland Chemical Inc	1076
Borden Chemical, Inc.	1277
Brazil & Co.	1026
Carson Oil Co., Inc.	1405
Color Magic Inc	1328
Container Recovery, Inc.	4015
Dura Industries Inc	111
End of Swan Island Lagoon	3901
Estey Corporation	1430
Federal Express	3807
Fred Meyer - Swan Island	44
GI Trucking	1840
Jinkz Corp	2423
JR Simplot	3343
Office Depot	260
Portland Container Repair Corporation	2375
Santa Fe Pacific Pipelines	2104
Trumball Asphalt [Owens Corning Yeon]	1160
Insignificant Pathway - Minimal stormwate	er runoff (8)
Ash Grove Cement - Rivergate Plant	4696
Goldendale Aluminum Company	2440
GPC Linnton	333
Hercules Incorporated	988
Nudelman & Son Inc.	966
Port of Portland Tract O Property	5307
Union Station - Track #5	1414
Willamette Cove	2066
significant Pathway - Stormwater captured/to be captured by	
Babcock Land Company	2361
Cascade Brake Products	1019
RK Storage And Warehousing	2376
Unocal SS 3911	1593

ANFRS Holdings/ABF Freight Systems	1820
Greenway Recycling	4655
enske Truck Leasing	5055
Vaterfront Pearl Cond. Construction Site	4535
Vestinghouse	4497
Insignificant Pathway - No evidence of contaminate	d stormwater (20)
Albers Mill Property	4590
Chapel Steel Inc	4920
Dasic International Corp.	110
astman Chemical Company	135
SCO Corp Willbridge Landfill	397
ront Avenue Mp	4008
Glacier Northwest Inc. Linnton	2351
Gould, Inc	49
Hoyt St. Railyard (Former)	1080
ndustrial Battery Building	935
Kittridge Distribution Center	2442
Master Chemical Inc.	1302
Mogul Corp.	1307
Pearl Building	4960
Port of Portland - Terminal 1 South	2642
Schnitzer Investment - Near NW 35th And Yeon	2424
Shaver Transportation Co	2377
Transloader International Company, L.L.C.	2367
Tucker Building	3036
Valvoline Inc	3215
No pathway for site COIs (e.g., groundwater site;	capped sites) (16)
ESCO Landfill – Sauvie Island	4409
Guilds Lake - NW Industrial St.	404
Hoyt St Train Yard - Parcel 1	1624
King-Ries Property	4560
Longview City Laundry & Cleaners Inc	1395
Lynden Farms	4461
McCormick & Baxter Creosoting Co.	74
Morse Bros.	2370
ODA Laboratory Services	1962
PGE - Substation E	3976
St. Johns - Keeler #2 Right-of-Way	1067
Tarr Inc	1139

Union Station - Parcel B South	1885
Union Station Horse Barn	2407
USPS - Fleet Operations	2183
WR Grace Co.	2761
Not a true site - Not shown on ma	p (12)
City of Portland Outfalls	2425
Crosby & Overton	877
Diesel Release - N Edgewater	1345
Doane Lake Study Area	36
Forest Park Drainage Tunnel, Former	3301
Mocks Bottom	1306
Portland Delivery Facility	3342
Portland Harbor Sediments	2068
South Rivergate Industrial Park	2980
St Helens Road Petroleum Contamination	2630
Texaco Product Pipeline	2117
Union Chemical	329
Outside Portland Harbor Watershed - Not sh	own on map (8)
Alder Creek Lumber Co., Inc.	2446
Flint Inc.	1753
Graphic Arts Center	187
Harsh Investments	878
Klix Corp of Oregon	1075
Multnomah County - St. Johns Site	2421
ODEQ Clean Up Sylvan Cleaners Site	1897
Zehrung	187



A more detailed version of this map, showing ECSI site numbers and outfall locations, will be available on DEQ's website at http://www.deg.state.or.us/lg/cu/nwr/PortlandHarbor/jointsource.htm

Attachment 1: Evaluating Stormwater Data

DEQ developed a series of charts to assist with the evaluation of stormwater data. The charts were created using contaminant concentration data from stormwater samples collected at Portland Harbor-area industrial sites. They are intended to be used as a screening tool for distinguishing "typical" industrial stormwater from stormwater containing potentially elevated contaminant concentrations. The charts will be presented in Appendix E of DEQ's *Guidance for Evaluating the Stormwater Pathway and Upland Sites* and will be available on DEQ's website in October 2010 at: http://www.deq.state.or.us/lq/cu/nwr/PortlandHarbor/stormwater.htm.

1.0 Basis for Using the Charts as a Screening Tool

The use of these charts as a screening tool is based on the premise that many kinds of industrial materials and activities have the potential to result in minor releases of contaminants, such as petroleum products in drips of oils, greases and fuels used for vehicles and machinery, phthalates off-gassing from paints and PVC piping, and zinc from galvanized building materials. Off-site sources, including highway traffic, operations at neighboring sites and atmospheric deposition, can also contribute to the contaminant load in stormwater runoff from a site.

As a result, industrial stormwater is likely to contain a somewhat predictable list of contaminants within a predictable concentration range even when good stormwater management practices are being implemented. If contaminant concentrations exceed these ranges, DEQ considers this to be a potential indicator of an uncontrolled source of contaminants at the site.

Some might question this rationale because all of the data used to create the charts were collected at contaminated or suspect sites and therefore would be expected to be more contaminated than typical industrial stormwater. DEQ considered this issue but considers it to be immaterial for two reasons. First, contaminated sites are likely to be contaminated by a few site-specific chemicals, and therefore stormwater would only show elevated concentrations of those specific contaminants and only if they were exposed to stormwater. All of the other contaminants would be expected to be present in stormwater at "typical" concentrations.

Second, as a screening tool, the charts are simply intended to identify sites that "stand out from the crowd." This information helps DEQ determine the need for additional evaluation or source control at a site. Since the charts are not used for directly evaluating potential waterbody impacts from the stormwater, the upper and lower bounds of the "typical" concentration range are not particularly relevant.

Due to the highly variable nature of stormwater, interpretations made using these charts should only be considered in the context of other lines of evidence and should not be presumed to provide conclusive evidence of the presence or absence of contamination at a site.

2.0 Chart Development

The charts were created using stormwater data from industrial sites in the Portland Harbor area of the Willamette River (River Mile 1.9 - 11.8). The largest single dataset was developed by the

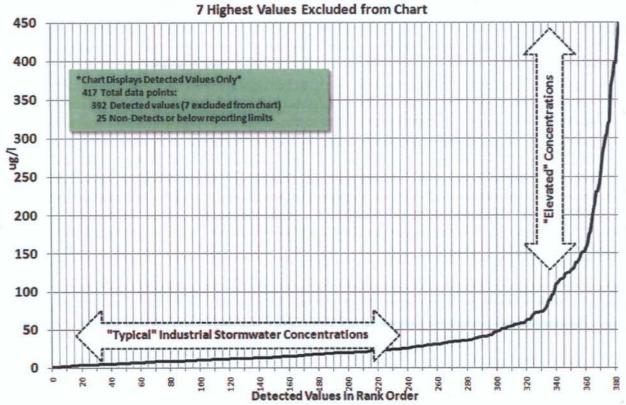
Lower Willamette Group (LWG) in the course of their Round 3 sampling events for the Portland Harbor Remedial Investigation. This dataset includes stormwater data collected at 21 heavy industrial locations during 2007 and 2008. The rest of the data was submitted to DEQ by ECSI sites.

The charts present the stormwater data but do not specify the sample locations or methods. This information is only available in the original data reports. In almost all instances, stormwater samples were collected under a DEQ- or EPA-approved workplan. Both grab sample and composite sample data are included in the charts.

To create the charts, all of the detected values for a given contaminant were compiled and organized in rank order (i.e., lowest to highest concentration; charts include J-flagged/estimated values). The data were then plotted on a chart. The chart's X axis is the rank of each data point and the Y axis is the concentration. Information on the number of non-detected values for each contaminant is also provided on the chart.

An example of a typical chart for a stormwater contaminant is provided below. In most charts there is a definitive "knee" in the curve and the majority of data points fall within the relatively flat portion of the curve below the knee.

Stormwater Contaminant X at Portland Harbor Heavy Industrial Sites



3.0 Screening Stormwater Data Using the Charts

The use of these charts as a screening tool is based on the assumption that the lower, flatter portion of the curve represents the contaminant concentration range that is typical of stormwater from Portland Harbor industrial sites. Consequently, when one or more contaminants are present at significantly higher concentrations (i.e., "elevated" concentrations represented by the steeper portion of the curve) it is an indicator that additional investigation and/or source control may be needed.

To evaluate stormwater data from a specific site, determine where the contaminant concentrations fall along the curve on the relevant chart.

- Concentrations falling within the lower/flatter portion of the curve suggest that
 stormwater discharges are not being unusually impacted by contaminants at the site and
 are therefore representative of "typical" industrial stormwater for Portland Harbor sites.
 However, this interpretation should not be considered to be a conclusive line of evidence.
 A determination that no additional source control or evaluation is necessary should be
 corroborated by other lines of evidence.
- Concentrations falling within the **upper/steeper portion of the curve** are an indication that uncontrolled contaminant sources may be present at the site and additional evaluation and/or source control measures may be warranted. The objective would be to determine the source(s) of the elevated concentrations and, based upon that, whether and what types of source control measures are needed.

4.0 Interpreting the Results

The screening results need to be evaluated based upon the characteristics of the site. Some sites can be expected to have higher concentrations of certain types of contaminants simply as a result of the type of operations (e.g., phthalates associated with painting activities, PAHs associated with heavy equipment and fueling). Slightly higher concentrations of specific contaminants might be considered to be "normal" at these sites but indicate potential contamination at others.

However, "normal" is not the same as acceptable. As stated above, these charts are used for identifying potentially contaminated sites and helping to guide source control evaluations. They are not designed to be used for evaluating the potential waterbody impacts of stormwater discharges.

An additional consideration when evaluating stormwater data is whether the data are likely to be representative of typical stormwater discharges from the site. Stormwater samples taken from the same location can show widely varying concentrations depending on the duration and intensity of the storm events that were sampled, whether the sample was collected early or late in the storm, the length of the dry period preceding the storms, and the activities occurring at the site since the previous storm event. This should be considered when determining how much weight to apply to stormwater data in the course of a stormwater evaluation and/or whether additional data is needed to support a decision.

Milestone Report

for Upland Source Control at the Portland Harbor Superfund Site

September 2010

Prepared by the Oregon Department of Environmental Quality



This document is posted on DEQ's web page at http://www.deq.state.or.us/lq/cu/nwr/PortlandHarbor/jointsource.htm.

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Attachments

- Table 1. Controlling Confirmed or Suspected Upland Sources of Contamination to Portland Harbor
- Table 2. Status of High Priority Sites
- Figure 1. Status of Source Identification in City Stormwater Basins
- Figure 2-a-c. Land Zoning and Ownership

1.0 Introduction

On December 1, 2000, a section of the lower Willamette River within the City of Portland, the Portland Harbor, was added to the Superfund National Priority List (NPL). In February 2001, the Oregon Department of Environmental Quality (DEQ), United States Environmental Protection Agency (EPA), and other governmental parties signed a Memorandum of Understanding (MOU) that provided a framework for cooperation in the investigation and cleanup of the Portland Harbor Superfund Site to optimize federal, state, tribal and trustee expertise and available resources.

Under the 2001 MOU, EPA was designated as the Lead Agency for investigating and cleaning up "in-water" contamination in the Harbor, i.e., contamination in the river water and underlying sediment using federal Superfund authorities. DEQ, using state cleanup authority, was designated as the Lead Agency for identifying and controlling "upland" sources of contamination, i.e., those sources of pollution adjacent to or near the river that may be contaminating river water or sediments. To coordinate in-water cleanup and upland source control work, the MOU directed DEQ and EPA to jointly develop a source control strategy that defines a process for identifying and controlling potential sources of contamination threatening the river.

DEQ and EPA finalized the Portland Harbor Joint Source Control Strategy (JSCS) in December 2005². The overarching goal of the JSCS is to identify, evaluate and control sources of contamination that may affect the Willamette River in coordination with the objectives and schedule for the Portland Harbor remedial investigation and feasibility study (RI/FS). Upland source control is necessary to allow cleanup of the river to proceed without risk of significant recontamination. DEQ is currently implementing the JSCS in the Portland Harbor Superfund Site study area – approximately River Mile (RM) 1.9 to River Mile 11.8³.

The JSCS requires DEQ to prepare a Milestone Report on a quarterly basis that summarizes the status of DEQ's upland source control work. The report submittal schedule has been changed to bi-yearly. This is the ninth Milestone Report. Milestone Reports are submitted to EPA, and provide the basis for potential meetings with EPA and our government partners to discuss site prioritization and source control progress. These reports also serve as documentation of progress on river-wide source control within Portland Harbor.

1.1 Organization of the Milestone Report

The Milestone Report is organized as follows.

¹ The signatory partners to the MOU include the EPA, DEQ, Confederated Tribes and Bands of the Yakama Nation, Confederated Tribes of the Grand Ronde Community of Oregon, Confederated Tribes of Siletz Indians, Confederated Tribes of the Umatilla Indian Reservation, Confederated Tribes of the Warm Springs Reservation of Oregon, Nez Perce Tribe, National Oceanic and Atmospheric Administration, Oregon Department of Fish and Wildlife, and U.S. Department of the Interior.

² The JSCS is available on DEQ's web site at http://www.deq.state.or.us/lq/cu/nwr/PortlandHarbor/jointsource.htm ³ "River Mile" indicates the distance from the Willamette River's confluence with the Columbia River (i.e., River Mile 11.8 is 11.8 miles upstream of the confluence).

- Section 2.0: Identifying Potential Sources of Contamination in Portland Harbor This section describes DEQ's work to identify potential sources of contamination to the Willamette River in Portland Harbor, including site discovery and site assessment activities.
- Section 3.0: Evaluating Potential Sources of Contamination to the River This section describes DEQ's status and schedule for the evaluation of all confirmed or suspected upland sources of contamination to Portland Harbor, as summarized in Table 1.
- Section 4.0: Taking Measures to Control Sources and Making Source Control Decisions This section describes the source control measures used at upland sites in Portland Harbor and the process for making source control decisions, including coordination with EPA and our government partners, and public involvement opportunities. Source control measures and decisions are summarized in Table 1.
- Section 5.0: Status of Ongoing and Completed Source Control Activities This section
 describes the information presented in Table 1 that summarizes the status of ongoing and
 completed source control measures. This section also describes the specific status of the 16
 High Priority and Preliminary High Priority sites (Table 2). This section also presents five
 specific source control goals designed to help DEQ focus our efforts to achieve the
 overarching goal of source control.
- Section 6.0: Issues Encountered in Source Control Work This section describes issues affecting DEQ's ability to conduct source control work and identifies paths forward towards resolution.
- Section 7.0: Summary This section summarizes the overall status of source control work in Portland Harbor, highlighting accomplishments, key issues and next steps for moving forward.
- Section 8.0: Obtaining Additional Information on Upland Source Control Work This section indicates where additional information can be found on the status of source control work at upland sites in Portland Harbor.
- Section 9.0: Information on Table 1: Controlling Confirmed or Suspected Upland Sources of Contamination to Portland Harbor – This section provides helpful information for interpreting Table 1, including definition of key terms and acronyms used.

2.0 Identifying Potential Sources of Contamination in Portland Harbor

DEQ's strategy for identifying and investigating potential sources of contamination to Portland Harbor prior to the December 2000 Superfund Site listing was described in the March 2006 Milestone Report. Those site identification and investigation activities were initially focused on a six-mile stretch of the lower Willamette River (now known as the Initial Study Area) extending from the southern tip of Sauvie Island upstream to Swan Island, from approximately River Mile 3.5 to River Mile 9.2. For more information, please see the March 2006 Milestone Report or please contact DEQ's Portland Harbor project manager, Jim Anderson at (503) 229-6825 or anderson.jim@deq.state.or.us

2.1 Recent Site Discovery and Site Assessment activities

As would be expected, DEQ's site discovery/site assessment activities have decreased now that we've reached an intermediate stage of the upland source control effort and the significant sources are being addressed. This is not to say that additional site discovery work won't be necessary, it simply means that we are currently directing our energy toward completing site investigations and source control measures at existing Environmental Cleanup Site Information (ECSI) sites.

There are two main efforts that will help shape DEQ's future site discovery activities. One is the information contained in the Lower Willamette Group's (LWG) Draft Risk Assessment and Remedial Investigation documents and the ongoing process to develop the draft Feasibility Study. It's possible that information from these documents could identify specific areas where additional source identification is warranted.

The second effort involves discovering stormwater sites. New stormwater site discovery efforts tend to be targeted and are triggered by recently collected data. The majority of this work is conducted as a collaborative effort between the City and DEQ under the Intergovernmental Agreement (IGA) between DEQ and the City's Bureau of Environmental Services (BES), to identify, investigate, and control contaminant discharges to shared City stormwater conveyance lines. Over the past two years, the City has undertaken a comprehensive source investigation effort on the east side of the river between RM 11 and 11.3. The City is also undertaking additional source investigations in Outfall Basins 52, 52C and 53 based upon the findings presented in their February 2010 Stormwater Evaluation Report. These efforts are described below.

River Mile 11-East Source Investigations

Round 3 Portland Harbor sediment data collected by the LWG identified sediments contaminated by polychlorinated biphenyls (PCBs) on the east side of the river between RMs 11 and 11.3. Subsequent in-river sediment sampling by the City identified elevated PCBs between RMs 11 and 11.5. The current conceptual model is that the sediment contamination is largely due to past releases from historic operations in the area, but that current stormwater and bank erosion pathways may still exist. To evaluate whether there are ongoing stormwater sources, the City implemented a sampling plan in three City stormwater basins discharging into the river between RM 11 and 11.3 (Basins 43, 44, and 44A). Source investigation efforts are presumed to be complete for Basins 44 and 44A and are still underway in the Outfall 43 basin. In Basin 44, PacifiCorp is currently implementing source investigation and control measures to address PCB-contaminated soils and to prevent contaminants from migrating offsite and to the river in stormwater runoff.

City of Portland's Stormwater Evaluation Report (February 2010)

There are 38 City outfalls in Portland Harbor. As part of the City's 20-year combined-sewer overflows abatement program, to be completed by 2011, all or a portion of the stormwater discharging through fifteen City outfalls are being diverted to the wastewater treatment plant. For basins that will continue to discharge to the river, the City conducted basin evaluations to determine if there was potential for significant sources in the basins. If so, source tracing was conducted to identify sources that need to be controlled through either DEQ or City authorities.

In 2009, the City undertook a comprehensive evaluation of stormwater and sediment trap data collected from City outfall basins to evaluate additional source tracing needs and help shape future data collection objectives. The evaluation included data collected by the City as well as data collected by the LWG and Port of Portland in support of the in-water Remedial Investigation. The findings from this evaluation generally support the City's and DEQ's belief that all major sources within City outfall basins have been identified. However, the results also indicate that additional investigation may be warranted in a small number of basins where slightly elevated concentrations of certain contaminants could not be explained by the known sources/land uses in those basins.

A status of the source identification efforts in the City outfall basins as of August 2010 is provided below. This information is also presented in Figure 1.

August 2010 Status of Source Identification at City Outfalls in Portland Harbor		
No Significa	nnt Sources in Basin and Insignificant or Incomplete Pathway	
19 Outfalls	Outfall Designations: M-2, M-3, S-2, S-5, 10A, 11, 13, 14, 19A, 22D, 23, 24, 42, 44A, 48, 49, 50, 52A	, 47,
Source Iden	tification in Basin is Complete	
15 Outfalls	Outfall Designations: M-1, S-1, S-6, 15, 16, 17, 18, 19, 22, 22B, 22C, 46, 44, 45, 53A	
Additional	Source Identification Needed or May be Needed in Basin	a de la companya de
4 Outfalls	Outfall Designations: 43, 52, 52C, 53	

2.2 Downtown Portland Willamette River Sediment Investigation

DEQ continues our work with the City of Portland and other partners to investigate sediment quality in the Willamette River upstream of the Portland Harbor in downtown Portland. The results of the initial investigation broadened our understanding of the previously existing limited sediment-quality data, and allowed us to gain a better understanding of the nature and extent of hazardous substances in the downtown reach. The first phase of the investigation collected surface sediment and/or cores samples from nearly 80 locations.

The field work for the downtown reach sediment investigation was completed in June 2008. Results from this first phase are compiled in the GSI Water Solutions, Inc 2009 report "Field and Data Report, Downtown Portland Sediment Characterization". This report can be viewed at: http://www.deq.state.or.us/lq/cu/nwr/willametteriver.htm

DEQ completed a review of this first phase of the investigation. The results of the review are found in a 2009 DEQ report entitled "Downtown Portland Willamette River Sediment Evaluation-Preliminary Identification of Areas of Interest." A focused second phase of investigation was completed in early 2010. This Phase II sampling was completed to better prioritize areas of interest for follow-up action, lay the foundation for source identification investigations, and in some cases begin to assess contaminant extent. Results from the Phase II

work are compiled in GSI's 2010 "Field and Data Report, Downtown Portland Sediment Characterization Phase II". All reports can be viewed at: http://www.deg.state.or.us/lq/cu/nwr/willametteriver.htm

DEQ is evaluating the investigation results for both phases of work to help assess area-wide contaminant levels and identify areas where source identification efforts are warranted.

Within the downtown reach, PGE is conducting an investigation of in-water sediment and upland source control between RM 13.1 -13.5 east. Two upland preliminary assessments and data reports from three upland investigations and the in-water sediment investigation have been completed in 2010. A remedial investigation covering both in-water and upland data is due in late-2010. This information will help determine potential remedial and source control actions.

The Zidell Waterfront property is located at the upstream edge of the downtown reach on the west side of the river beneath the Ross Island Bridge. The ZRZ Realty Company (Zidell Company) and other site operators conducted ship dismantling, ship building, welding, and other miscellaneous industrial activities at the site from approximately 1925 to the mid-1960s. The Zidell Company began on-site barge-building operations in 1968 and those activities continue today. Portions of the upland property are impacted by releases of metals, petroleum hydrocarbons, PCBs, asbestos, and other contaminants. The Zidell Company is working under a DEQ consent judgment to cleanup contaminated upland soil and Willamette River sediment adjacent to their property. The Zidell Company initiated upland soil cleanup this summer, and plans to begin sediment remediation summer 2011.

3.0 Evaluating Potential Sources of Contamination to the River

DEQ is investigating or directing source control work at over 60 upland sites in Portland Harbor. Preliminary investigation activities at these sites are designed to determine whether the site is a potential or ongoing source of contamination to the river. These investigations, or "source control evaluations," consider all potential, current and historic contaminant sources and current or reasonably likely future contaminant migration pathways for the contaminants to be transported to the river. Potential pathways include:

- Direct discharges Pollutants from commercial, industrial, private or municipal outfalls have
 in the past and continue to be discharged directly to the Portland Harbor Superfund Site.
 Levels of contaminants in historic discharge streams were much greater than recent and
 current loads due to better environmental awareness and government controls (e.g., permits.
 Many current discharges are permitted (general or individual permits) under the Clean Water
 Act National Pollutant Discharge Elimination System (NPDES). Permitted discharges
 include industrial wastes, stormwater runoff, and combined-sewer overflows (CSOs)⁴.
- Groundwater Contaminated groundwater may enter the river directly via discharge through sediments, bank seeps, or it may infiltrate into storm drains/pipes, ditches or creeks that

⁴ CSO events are untreated discharges of combined stormwater, sanitary sewage from residential, commercial, and industrial sources that overflow from the sewer system into the river during heavy rainfall periods when the amount of stormwater and sewage exceeds the capacity of the collection system.

discharge to the river. Contaminant migration may occur as non-aqueous phase liquids (NAPLs) or as chemicals dissolved in the groundwater itself.

- Stormwater Contaminants may be carried to the river by water that runs off a site into storm drains after it rains, delivered to the river by stormwater pipes (including permitted and unpermitted stormwater discharges).
- Overland transport/sheet flow The uncontrolled flow of water from a site to the river and the transport of other materials from a site may deliver contaminants to the river.
- Bank erosion/leaching River bank soil, contaminated fill, waste piles, landfills and surface impoundments may release contaminants directly to the river through erosion, via soil erosion to stormwater, or by leaching to groundwater.
- Overwater activities Contaminants from overwater activities (e.g., sandblasting, painting, unloading, maintenance, repair and operations) at riverside docks, wharves, or piers; discharges from vessels (e.g., gray, bilge, ballast waters); full releases; and spills may affect the river.

These potential contaminant migration pathways are evaluated for each site, and upland contaminant concentrations are screened against conservative screening level values (SLVs) protective of human health and the environment. Sites that are identified as significant current or potential sources of pollution to the river are characterized and prioritized. Based on the resulting priority, either further source control evaluation is completed or source control measures are initiated.

Table 1 provides a summary of confirmed and suspected upland sources of contamination to the river that DEQ is either actively working on or has finished source control work on by issuing a final source control decision. Table 1 also provides the basis for the determination that a site is a source of contamination to the river, the status of and schedule for source control evaluation, and the priority of the site for source control. The table includes the priority of each contaminant migration pathway for each site, as well as the overall priority of the site based on the pathway priorities.

High priority sites are identified in the table based on existing site information, and subsequent Milestone Reports will identify any new high priority sites as new information becomes available. Source control is expected to move forward at high priority sites without delay.

4.0 Taking Measures to Control Sources and Making Source Control Decisions

DEQ determines the need for source control measures at each upland site, in consultation with EPA, based on the completeness of contaminant migration pathways, exceedances of SLV, and other factors as appropriate. See p. 3-1 through 3-6 of the JSCS for more information about SLVs, and p. 4-1 through 4-10 of the JSCS for more information about the source control decision process.

4.1 Types of source control measures

Upland source control is an iterative process where early steps may be revisited and conclusions refined by information gathered later in the process. A combination of tools may be used to control a source, including but not limited to the following.

- <u>Technical assistance</u> Technical assistance, often provided during inspections, provides technical information designed to help individual businesses bring their facilities into compliance with environmental regulations. DEQ's Hazardous Waste Program has and continues to provide technical assistance to facilities within the Portland Harbor Superfund Site area.
- <u>Cleaning-up contaminated upland areas</u> Cleanup work addresses contaminated soil, groundwater, stormwater and other sources; and focuses on reducing or eliminating contaminant migration to the river. Common source control measures include removing highly contaminated soil areas, stabilizing or capping contaminated bank areas, treating or containing contaminated groundwater, and extracting contaminated sediment from storm sewer systems. Source control measures vary from site to site.
- Source control of active discharges Tools to control active discharges include best management practices (BMPs), industrial process changes, pollution prevention practices, and technology-based effluent controls. Compliance is achieved voluntarily or through administrative actions, including permits or enforcement.
- Source control of stormwater Stormwater source control is complex because storm drain systems capture discharges from many different sources (e.g., land use activities, runoff from contaminated sites, and infiltration of contaminated groundwater into the storm drain system). Stormwater regulation also involves state and local agencies implementing MS4 and 1200Z general stormwater permits. Because of this complexity, all of the tools described above are useful for stormwater source control and will be used as appropriate.
- Administrative actions and enforcement Administrative actions include licenses, permits, deed restrictions, requirements for site development plans, and enforcement actions; which may be necessary when administrative actions are violated. Agencies rarely take enforcement actions without first conducting an inspection and documenting findings, requested changes, warnings and offers of technical assistance. When enforcement actions are warranted, they are usually taken in escalating order, starting with notices of violation, moving to enforcement or compliance orders requiring specific changes by a set date, and ending with monetary penalties, court action or DEQ's takeover of investigation or cleanup work. Formal cleanup actions performed under an order or decree use oversight and enforcement to ensure that appropriate actions are taken in a timely manner.

Table 1 summarizes source control decisions at upland sites, the basis for the determination that upland source control measures are necessary, a summary of the selected source control measure(s), and a schedule for implementing the source control measure(s). Figure 2-a-c displays most sites listed in Table 1.

4.2 DEQ coordination with EPA and partners on source control decisions

As the Lead Agency for identifying and controlling sources of upland contamination threatening the river in Portland Harbor, DEQ coordinates with EPA and our government partners on source control work. This includes documenting, tracking and coordinating source control efforts as described in Sections 2.5 and 7 of the JSCS.

DEQ provides EPA and our partners an opportunity to review and comment on source control decisions prior to being finalized. These decisions typically fall into the following three categories.

- DEQ determined that a site is not a current or future significant source of contaminants to Portland Harbor and that no source control measures are required.
- DEQ selected the source control measures for a site.
- DEQ concluded that source control at a site is complete, or in the case of systems that require operation and maintenance (e.g., hydraulic containment), that the source control action is effective.

DEQ informs EPA and our partners of pending source control decisions and the schedule for review, and provides copies of source control decision documentation to EPA and partners upon request. EPA and partners have 30 days to provide comments to DEQ on source control decisions.

In addition to this regular review and comment process, some upland sites in Portland Harbor may warrant closer coordination between DEQ, EPA, and our partners for source control (e.g., the Gasco site and potential source control measures for the chlorinated solvent groundwater plume at the Siltronic site). In these instances, DEQ and EPA source control coordinators will develop project-specific coordination strategies.

4.3 Public involvement in source control decisions

DEQ Cleanup Program statutes and rules require that a public notice and comment opportunity be provided prior to DEQ's selection of a final site cleanup remedy and before DEQ determines that the cleanup is complete. For upland Portland Harbor cleanup projects, this means that DEQ issues a public notice and seeks public comments on the recommended final site cleanup strategy. Once public input is considered, DEQ's final decision is typically documented in a Record of Decision (ROD) for the site. For most sites, the upland DEQ ROD includes elements that address both source control for Portland Harbor and cleanup actions specific to areas of upland contamination that are not related to pollution in the Harbor.

Many of the source control measures implemented at upland sites are conducted prior to the selection of the final upland site-wide remedy. While public notice and comment is not required for these "interim" removal actions under DEQ statutes and rules, DEQ typically issues a public notice and seeks public comments when the action is likely to be a substantive piece of the final site remedy, or as the DEQ project manager determines is appropriate.

DEQ does not typically seek public comments for small-scale interim source control measures and time-critical actions. Project managers will, however, issue notices and/or press releases as appropriate to let the public know that the activity is being conducted.

5.0 Status of Ongoing and Completed Source Control Activities

Table 1 summarizes the status of ongoing source control activities; including source control evaluations (SCEs), source control decisions (SCDs), and source control measures (SCMs). Table 1 also provides information on source control activities completed to date, proposed SCM activities, and a target schedule for completion.

Table 1 also summarizes completed SCMs and provides the date that the SCM was completed, the date of EPA review and comment, and any operation and maintenance requirements associated with the SCM.

As of September 2010, the DEQ categorized 90 sites (see Table 1) into the following source control categories:

High Priority Sites- 11
Preliminary High Priority Sites- 5
Medium Priority Sites- 24
Low Priority Sites- 23
Priority "To Be Determined" Sites- 3
Sites with Source Control Decisions- 24

The status of High Priority and Preliminary High Priority sites is presented in Table 2. Twelve of the 16 High Priority sites currently have at least interim SCMs in place. Some of the more important actions in-place or anticipated at the High Priority sites include:

-Evraz Oregon Steel Mills- Two separate source control efforts are moving forward at the EOSM site. 1st, stormwater is being addressed through a combination of best management practices and end-of-pipe treatment. Phase I of the end-of-pipe treatment. addressing stormwater flow to the northern facility outfall, was installed in 2007 and underwent pilot testing in 2007/2008. Based on the results of the pilot test, the system was expanded to capture stormwater flow going to the central facility outfall in 2008. A Phase II pilot study was conducted in 2009. EOSM will conduct testing to evaluate any toxicity associated with the coagulant they are using followed by a loading evaluation to assess contaminant releases to the Willamette River via stormwater. EOSM is hoping to complete both studies in the 2010/2011 water year, and determine if any further stormwater source control action is necessary. 2nd, riverbank treatment source control measures are in re-design largely to resolve stakeholder concerns regarding mitigation. habitat conservation and restoration, and to incorporate bioengineering components. EOSM plans to re-submit their 404 Permit application in 1st quarter 2011, re-engage natural resource trustee stakeholders in the new design, and construct the riverbank source control measure in 2012 or 2013.

-Schnitzer Steel- Schnitzer Steel proposed a stormwater management plan in fall 2008. The plan will provide comprehensive management of stormwater including both re-use as onsite process water and end-of-pipe treatment. Phase 1A of the plan calls for abandoning a number of stormwater outfalls, collecting stormwater from most of the site, routing the stormwater thru screen filters to a storage tank, and then either re-using the water or discharging the water under an NPDES permit. The storage tank discharges to the river will be monitored and compared to JSCS SLVs. Additional treatment will be added if necessary. Phase 1A was completed late 2009. Phase 1B consists of paving the Phase 1A construction area. Phase 2 will capture stormwater from several additional on-site

drainage basins and route the stormwater to the new filtration and storage system. Phase 2 stormwater improvements are expected to be constructed in fall 2010 and summer 2011. Stormwater basins not captured by the on-site end-of-pipe treatment will be evaluated by the SCE process.

- -Arco/BP- A new permanent seawall sheetpile wall was installed in summer 2007. The sheetpile wall will enhance existing hydraulic control of contaminated groundwater. A riverbank soil and near-shore sediment removal and capping was completed in fall 2008. Approximately 16,000 cubic yards (cy) of petroleum-contaminated soil/sediment were removed and shipped offsite for disposal. The project was completed in summer 2009 by removing the in-river temporary sheetpile wall, final site grading, and planting.
- -Gasco- NW Natural's Gasco site (which includes NW Natural's manufactured gas plant contamination on the Siltronic site) is a High Priority site for upland source control. The distribution and magnitude of upland contamination at the Gasco site is extensive and very significant. Based on an October 2007 Focused Feasibility Study (FFS), DEQ selected a SCM combination consisting of a vertical barrier wall and groundwater pumpand-treat system in the Gasco former tar pond area and pump-and-treat elsewhere along the shoreline. NW Natural recently completed a number of studies to support the design of this SCM. Based on their studies, NW Natural recommended a revised SCM in summer 2009 for the former tar pond area consisting of only the pump-and-treat component. DEO has a number of concerns with NW Natural's recommended SCM..., particularly that it will exacerbate exiting conditions by potentially mobilizing manufactured gas plant waste (dense non-aqueous phase liquid) without capturing it. In June 2010, DEQ directed NW Natural to move forward with source control of dissolved phase contamination along approximately 1,300 feet of shoreline and defer source control in the former tar pond area to the upland feasibility study so that source control could be considered comprehensively. DEQ and NW Natural are currently in formal dispute resolution over source control in the former tar pond area. We expect to resolve the dispute in fall 2010.
- -<u>Siltronic</u>- An amended FFS was submitted December 2007 recommending an enhanced insitu bioremediation (EIB) SCM for the Siltronic chlorinated solvent groundwater plume. DEQ selected EIB to be applied in the release area. Siltronic completed application of EIB treatment media in the source area in summer 2008, has recently proposed expanding use of EIB further upgradient of the release area, and is currently monitoring results from the SCM.
- -Arkema is working on three separate upland source control efforts at their site. 1st, Arkema submitted an FFS for groundwater/NAPL in summer 2008. DEQ selected a slurry wall/groundwater extraction system as the SCM in 2009, and the SCM is in design. We anticipate SCM construction to begin in summer 2011. 2nd, Arkema submitted a stormwater FFS in summer 2008, DEQ selected a stormwater SCM earlier this year and Arkema entered a DEQ Water Quality Mutual Agreement and Order in July 2010 to design, construct and monitor a new stormwater system. The stormwater SCM will consist of berming the perimeter of the site to prevent off-site overland flow, temporarily capping higher-level contaminated soil, decommissioning the existing collection and conveyance system including 3 of the 4 existing outfalls, installing a new collection/conveyance system which will route stormwater to a detention pond to reduce the suspended load, and discharging stormwater from the pond through a filter system to

the river. Stormwater SCM construction is expected to begin in 2011 and conclude by the end of 2011. 3rd, Arkema evaluated their riverbank and the threat that portion of the site poses to the river. Riverbank source control is anticipated to be incorporated into the EPA-lead in-water Early Action at Arkema. Arkema will evaluate riverbank SCM options in 2010-11.

-Rhone-Poulenc- The responsible party at Rhone Poulenc, SLLI, is working on three major upland source control/evaluation efforts at their site. 1st, SLLI submitted a comprehensive SCE report in early-2008, DEO reviewed the report, SLLI will revise the report after collecting significant additional hydrogeologic information to inform the conceptual site model, and submit the revised report in October 2010. 2nd, SLLI pilot tested several SCMs to treat and/or control their most significant groundwater plume threatening the river. SLLI has completed an extensive, long-term groundwater pumping test to support the design of their North Front Avenue SCM which targets contaminated groundwater moving in the highly conductive fractured basalt zone. The pumping test includes a number of extraction wells that could largely comprise the SCM. The pumping test concluded in August 2010. Construction of any supplemental portions of the SCM is anticipated for early 2011. 3rd, SLLI removed accumulated sediment from Outfall 22B stormwater lines and grouted the lines to at least partially prevent contaminated groundwater from invading the lines. In the second half of 2009, SLLI cleaned out the lines and installed impermeable liners in the stormwater lines to further prevent groundwater invasion. In addition to these three ongoing source control efforts, SLLI: 1) spent two field seasons removing drums and debris from the Doane Lake area, 2) completed an on-site Facility Structures Interim Remedial Action Measure (IRAM); 3) completed the Groundwater Extraction and Treatment System (GETS IRAM) in 2005 designed to capture alluvial zone groundwater in the Herbicide Area; and 4) started the West Doane Lake (WDL IRAM) in 2010 to stabilize and cap West Doane Lake sediments.

DEQ developed five specific goals for our source control efforts. These goals will track DEQ source control efforts to achieve the overarching goal of source control: to identify, evaluate and control sources of contamination that may affect the Willamette River in coordination with the objectives and schedule for the Portland Harbor RI/FS.

The goals described below are aggressive goals that were based on an anticipated ROD date of 2010. While much progress has been made to reach these goals, some remain outstanding. Some of the reasons these goals have not been achieved include the complexity of the work, work load for both DEQ and upland responsible parties, and obstacles in implementing the work. While all the goals have not been met, DEQ believes these sites remain on-track to achieve source control at the High Priority sites by the time of the Portland Harbor ROD. The Portland Harbor ROD is now optimistically anticipated to be completed in late-2012. Dates for the goals below have been adjusted to better reflect the current status and the new anticipated ROD date.

Goals and Status for High Priority Sites

Goal 1- Source Control Evaluations (SCE) completed at all High Priority sites by 1/1/10.

Goal 1 Status as of 9/10

-2 of 16 SCEs completed

- -2 of 16 SCEs currently under review by DEQ, to be completed in 2010
- -5 of 16 SCEs to be completed in 2010
- -Of the 7 remaining High Priority sites (16 minus 9) that are either not completed or are not on schedule to be completed by the end of 2010, stormwater is the only outstanding pathway to be completed in 4 of the 7 sites.

Goal 2- SCMs selected at all High Priority sites by 7/1/10.

Goal 2 Status as of 9/10

- -Interim or final SCMs have been selected and have been implemented at 12 of 16 sites. These sites include: 1) EOSM (stormwater), 2) Schnitzer Steel (stormwater), 3) Kinder Morgan Linnton (groundwater), 4) Exxon/Mobil (groundwater), 5) Arco/BP (groundwater and riverbank/beach), 6) MarCom South (overland runoff), 7) Siltronic (groundwater), 8) Rhone Poulenc (groundwater and stormwater), 9) Arkema (groundwater), 10) Willbridge (groundwater), 11) Gunderson (groundwater), and 12) City Stormwater (line cleanouts).
- -Selection of SCMs at other High Priority sites is anticipated over the next 6-12 months. For instance, 1) DEQ selected a significant SCM at the Gasco site in March 2008. NW Natural completed a series of field efforts designed to support the detailed design of this SCM, a vertical barrier wall/groundwater extraction well system. NW Natural proposed a revised SCM in their 11/09 Interim Design Report, and DEQ and NW Natural are currently in formal dispute resolution over the next steps in source control and the upland RI/FS. We expect the dispute to be resolved in fall 2010..., 2) EOSM has further characterized the nature and extent of riverbank contamination, produced initial designs, and has been in negotiation with the Corps and natural resource trustees for the construction of riverbank treatment SCM at their facility. Construction of that river bank SCM is expected to begin in 2011 or 2012...., 3) late-2009 construction of an end-of-pipe stormwater filtration, storage and reuse at the Schnitzer Steel site. Schnitzer Steel is currently expanding the area of their facility that drains into the stormwater reuse/treatment system..., 4) DEQ recently selected a vertical barrier wall/groundwater extraction wells system as a groundwater/NAPL SCM for the Arkema site. The SCM is currently in final design and construction is scheduled to begin in 2011. DEQ also recently selected a stormwater SCM for the Arkema site. The stormwater SCM is currently in design and construction is expected to begin in 2011.

Goal 3- SCMs constructed and effectively operating at all High Priority sites by 1/1/12. Goal 3 Status as of 9/10

-5 of 16 sites have effective groundwater SCMs operating. These 5 sites include: 1) Exxon/Mobil, 2) Gunderson, 3) Willbridge, 4) Arco/BP, and 5) Siltronic.

Goals and Status for Medium and Low Priority Sites

Goal 4- SCE completed at all Medium and Low Priority sites by 1/1/11

Goal 4 Status as of 9/10

-Two of the 24 Medium Priority sites currently have completed SCEs..., 10 of the 24 sites have interim source control measures in-place..., and 7 of the 24 sites are on schedule to be completed in 2010. Two of the 23 Low Priority sites currently have

completed SCEs..., 13 of the 23 have interim source control measures in-place..., and 7 of the 23 sites are on schedule to be completed in 2010.

Goals and Status for Priority "To Be Determined (TBD)" Sites

Goal 5- Completed prioritization at all TBD sites by 1/1/10.

Goal 5 Status as of 9/10

- -2 of the 3 sites are EPA-lead sites (Vanwaters-&-Rogers & US Moorings).
- -Koppers is the one last TBD site.

6.0 Issues Encountered in Source Control Work

This section summarizes issues affecting DEQ's completion of source control work. This section also presents the steps DEQ is taking to resolve the issues and complete source control work.

<u>Issue 1: Moving projects through the source control process</u>

Certain DEQ Portland Harbor cleanup projects are not proceeding through the source control process at an acceptable pace. There continues to be a number of reasons for the lack of adequate progress at these sites, including: complexity of the site, limited DEQ staff resources, uncertainty regarding liability/responsibility for the needed environmental work, reluctance of the responsible party to move forward, and economic strains on many of the responsible parties. Source control activities at these sites need to be accelerated in order to identify, evaluate and control upland contaminant sources before the Portland Harbor ROD. Moving High Priority sites forward has been an ongoing issue for DEQ. We are focusing our attention on these sites and working with the upland responsible parties to move these projects forward. Two of these sites include:

• Burgard Industrial Park

Problem: At one time, Schnitzer Investment Corporation (SIC) owned the roughly 200-acre Burgard Industrial Park (BIP) that partially surrounds the International Terminals Slip at RM 4. A number of tenants leased properties in BIP. Over the past several years, SIC sold much of the BIP, including approximately 81 acres to Schnitzer Steel in May 2005. Schnitzer Steel operates their scrap metal recycling yard and marine terminal on property sold in 2005. DEQ now understands SIC currently owns approximately 21.5 acres of the BIP. SIC entered into a DEQ Voluntary Agreement in 2000 to perform a remedial investigation and source control measures for BIP. Since signing the agreement, DEQ and SIC have focused on the Schnitzer Steel portion of the BIP area. DEQ recently requested SIC conduct SCE in BIP outside the Schnitzer Steel site. SIC initially declined our request stating that since SIC didn't have access rights to the property they sold, and SIC would not be able to perform SCE for the portions which have been sold.

Path to resolving and Progress Made since the December 2009 Milestone Report: SIC has now agreed in concept to conduct stormwater source control evaluations at BIP, and DEQ and SIC are negotiating a scope of work and implementation schedule for that work. However, that scope of work and implementation schedule has not been finalized.

GS Roofing

<u>Problem:</u> The DEQ project manger overseeing work at GS Roofing left DEQ in 2007, and the vacant position was not filled in a timely manner due to agency budget constraints. This,

and continuing staff-resource challenges has affected the progress of source control work at the site.

<u>Path to Resolving</u>: DEQ made GS Roofing site a priority for staffing and accelerated source control work. GS Roofing conducted independent investigations of the facility. The next step in the project is for DEQ to review this information and provide direction regarding what additional work is required and a schedule for this work. DEQ assigned a new project team to the GS Roofing project in early 2009.

<u>Progress made since December 2009 Milestone Report</u>: GS Roofing completed a stormwater system characterization effort and implemented several BMPs in response to the findings. The stormwater SCE report is expected to be completed in early 2011. The responsible party is developing a scope of work for the remaining elements of a comprehensive SCE.

Issue 2: Completing source control at the Gasco site

NW Natural's Gasco site (which includes NW Natural's manufactured gas plant contamination on the adjoining Siltronic property) is a High Priority site for upland source control. The distribution and magnitude of upland contamination at the Gasco site is extensive and very significant. Based on an October 2007 Focused Feasibility Study, DEO selected a SCM combination consisting of a vertical barrier wall and groundwater pump-and-treat system in the Gasco former tar pond area and pump-and-treat elsewhere along the shoreline. NW Natural recently completed a number of studies to support the design of this SCM. Based on their studies, NW Natural recommended a revised SCM in summer 2009 for the former tar pond area consisting of only the pump-and-treat component. DEQ has a number of concerns with NW Natural's recommended SCM..., particularly that it will exacerbate exiting conditions by potentially mobilizing manufactured gas plant waste (dense non-aqueous phase liquid) without capturing it. In June 2010, DEQ directed NW Natural to move forward with source control of dissolved phase contamination along approximately 1,300 feet of shoreline and defer source control in the former tar pond area to the upland feasibility study so that source control could be considered comprehensively. DEQ and NW Natural are currently in formal dispute resolution over source control in the former tar pond area. We expect to resolve the dispute in fall 2010.

Issue 3: Completing source control at the Arkema site

As stated in Section 5, Arkema is working on three separate upland source control efforts at their site. 1st, Arkema submitted an FFS for groundwater/NAPL in summer 2008. DEQ selected a slurry wall/groundwater extraction system as the SCM in 2009, and the SCM is in design. We anticipate SCM construction to begin in summer 2011. 2nd, Arkema submitted a stormwater FFS in summer 2008, DEQ selected a stormwater SCM earlier this year and Arkema entered a DEQ Water Quality Mutual Agreement and Order in July 2010 to design, construct and monitor a new stormwater system. The stormwater SCM will consist of berming the perimeter of the site to prevent off-site overland flow, temporarily capping higher-level contaminated soil, decommissioning the existing collection and conveyance system including 3 of the 4 existing outfalls, installing a new collection/conveyance system which will route stormwater to a detention pond to reduce the suspended load, and discharging stormwater from the pond through a filter system to the river. Stormwater SCM construction is expected to begin in 2011 and conclude by the end of 2011. 3rd, Arkema evaluated their riverbank and the threat that portion of the site poses to the river. Riverbank source control is anticipated to be incorporated into the

EPA-lead in-water Early Action at Arkema. Arkema will evaluate riverbank SCM options in 2010-11.

Issue 4: DEQ staff resource limitations

Limited staff resources continue to affect DEQ's ability to conduct and complete source control work in Portland Harbor. Current and projected future state budget estimates continue to challenge DEQ. Over the last several years DEQ hired four new project managers and a GIS Coordinator to work on Portland Harbor projects and other projects. DEQ continually looks at staff work load and develops priorities to address the most important work. DEQ will continue Portland Harbor source control efforts focusing on the most significant and potentially significant upland sources.

Issue 5: Stormwater evaluation and control

Stormwater pathway evaluations are a relatively new and evolving effort for DEQ's Cleanup Program. In January 2009, DEQ issued its *Guidance for Evaluating the Stormwater Pathway at Upland Sites*. The guidance is currently being updated and this version will be available in October 2010 on DEQ's Portland Harbor website at: http://www.deq.state.or.us/lq/cu/stmwtrguidance.htm

The updates to the guidance are intended to accomplish two objectives:

- 1. Make minor revisions to the text to clarify decision-making criteria.
- 2. Add a tool for evaluating stormwater data. This tool is described below.

Using the sizeable stormwater dataset generated by Portland Harbor investigations, DEQ developed a tool to assist with data interpretation. The tool can be used to help distinguish "typical" concentrations of contaminants in industrial stormwater from "elevated" concentrations that may indicate an uncontrolled source of contamination at a site. This distinction is important because it helps to determine the type of response warranted at the site. In general, stormwater discharges related to "normal" industrial operations are managed with stormwater Best Management Practices (BMPs) and, where appropriate, are regulated under Water Quality permits. If an uncontrolled contaminant source is suspected, it may be appropriate to invoke Cleanup Program regulations to conduct additional investigation and source control measures.

7.0 Summary

DEQ is making significant progress in controlling sources of contamination to the lower Willamette River in Portland Harbor, and is coordinating resources of its Cleanup, Hazardous and Solid Waste, Water Quality and Spills Programs to achieve upland source control objectives by the expected time of the Portland Harbor Record of Decision or shortly after. To date, DEQ has identified 90 upland sites that may be potential sources of contaminants in Portland Harbor, and most of these sites have been prioritized for additional investigation or source control. Additionally, DEQ evaluated a number of sites in our site discovery process throughout the Portland Harbor project and concluded these sites do not threaten the river.

As of September 2010, the DEQ categorized 90 sites (see Table 1) into the following source control categories:

High Priority Sites-11
Preliminary High Priority Sites-5
Medium Priority Sites-24
Low Priority Sites-23
Priority To Be Determined Sites-3
Sites with Source Control Decisions-24

DEQ will submit a Milestone Report to EPA twice a year, with the next Milestone Report scheduled for March 2011, and update Table 1 and Table 2 with the current status of source control work at all upland sites. For more information about the Milestone Report or DEQ's source control work generally, please contact Jim Anderson, DEQ Portland Harbor Project Manager, at (503) 229-6825, or anderson.jim@deq.state.or.us.

8.0 Obtaining Additional Information on Upland Source Control Work

For more information on DEQ's source control work at any of the sites listed in Table 1, see DEQ's Portland Harbor web page

(http://www.deq.state.or.us/lq/cu/nwr/PortlandHarbor/index.htm)

and click on "Upland Sites map" in the right hand corner. This link provides a map showing all Portland Harbor upland sites and summary reports of the status of source control work. Just open the map and click on the site you are interested in to connect to DEQ's Environmental Cleanup Site Information (ESCI) database, which houses current information on work at each site.

Alternatively, contact the DEQ project manager (PM) that is leading work on the site you are interested in. Contact information for each DEQ PM is listed on the last page of this report.

For more information on the status work on the Portland Harbor Superfund Site, see EPA's Portland Harbor web page (http://yosemite.epa.gov/r10/cleanup.nsf/sites/ptldharbor).

9.0 Information about Table 1: Controlling Confirmed or Suspected Upland Sources of Contamination to Portland Harbor

The purpose of Table 1, entitled Controlling Confirmed or Suspected Upland Sources of Contamination to Portland Harbor, is to track and share information on the status of DEQ's efforts to evaluate and control sources of pollution to the Willamette River in Portland Harbor. The table provides information on each upland site that DEQ is working on in the Harbor, including the status of evaluations to determine whether source control is needed, the progress of source control measures, and the status of source control decisions and EPA review. Below is some helpful information for interpreting the table, including definitions for key terms and acronyms.

Site Information and Project Status

The first columns of Table 1 provide basic background information on each site, including:

• the name of the site,

- the site's reference number for DEQ's Environmental Cleanup Site Information (ESCI) database,
- the location of the site (river mile and address),
- the DEQ project manager that is leading source control work,
- the type of agreement DEQ is using to direct cleanup activities at the site (i.e., Intergovernmental Agreement, Portland Harbor Agreement, Unilateral Order, etc.), and
- the status of work occurring at the site (i.e., Preliminary Assessment, Remedial Investigation, completed Source Control Decision, Remedial Design/Remedial Action, etc.).

Sites are listed in Table 1 based on their position alongside the Willamette River, or the "River Mile" associated with their location. The River Mile indicates distance of the site from the Willamette River's confluence with the Columbia River. Sites associated with a lower river mile occur downstream of sites with a higher river mile.

Sites listed in Table 1 are those in Portland Harbor at which DEQ is actively overseeing upland investigation or source control actions, or for which source control decisions have been made. DEQ updates the site information in ECSI when a Strategy Recommendation is made, but a site is not added to Table 1 until active oversight of the project is provided by DEQ.

Source Control Evaluation

The Source Control Evaluation (SCE) columns in Table 1 provide information on the status of DEQ's work to evaluate the need for source control measures, including the status of SCE for each potential pathway, the schedule for completing SCE, the basis for determining whether source control measures are needed, and the status of EPA review.

Potential pathways

Six standard pathways represent the major potential pathways that contaminants could follow to reach the river from an upland site. These pathways include:

- overland transport/sheet flow the uncontrolled flow of water and other material to the river from a site
- bank erosion erosion of material within the sloping bank areas of the site to the river
- groundwater groundwater plumes or discharges to the river via seeps or through preferential pathways
- stormwater stormwater discharges to the river that originate from a pipe or stormwater system, including unpermitted stormwater discharges and discharges under a DEQ general stormwater permit
- overwater activities the storage or use of hazardous substances over the water (i.e., storage tanks on docks, permanent work activities conducted over water), that if released would be a potential current or future source of contamination to the river; pipelines and other conveyance systems are not considered in this category, releases from these types of systems are reported to the Oregon Emergency Response System (OERS) system for clean up
- other may include permitted wastewater discharges, individually permitted stormwater discharges, air deposition or other pathways

Each of these standard pathways appears for each site in Table 1 to track SCE work on a pathway-specific basis.

Basis for determining the need for source control

DEQ evaluates each of the pathways listed above to determine the need for source control measures. DEQ makes this determination based on: (1) whether contaminants are present and whether the pathway is capable of carrying them to the river (if it is, the pathway is called "complete"); and if a complete pathway exists, (2) whether it is carrying contaminants to the river at concentrations that exceed the Screening Level Values (SLVs) provided in the Joint Source Control Strategy (JSCS)⁵.

Three general examples are provided below.

- Example 1: Initial investigations of a site that is adjacent to the river indicate that bank soils have the potential to erode and carrying contaminants into the river. DEQ oversees a SCE to determine whether contaminants are in fact present in the bank soils and whether the eroded bank soils are carrying or could carry those contaminants into the river. The SCE concludes that contaminants are present in the bank soils and the soils are carrying contaminants into the river; the pathway is deemed "complete." The SCE then determines whether the bank soils are carrying or could carry contaminants to the river at concentrations that exceed the SLVs in the JSCS. If they are or could carry contaminants to the river at concentrations exceeding SLVs, DEQ determines that source control measures may be needed and assigns a priority of high or medium to the pathway based on the degree of SLV exceedance (see "Priority levels for each pathway and site" below for more information on the priority levels). If it is a high priority, then the RP should move forward aggressively evaluating, designing, and implementing SCMs. If it is medium priority, then the RP should use the weight-of-evidence approach to determine if further SCE is needed or if SCMs are needed.
- Example 2: Initial investigations of a site adjacent to the river indicate that groundwater has the potential to migrate toward the river and carry contaminants. DEQ oversees a SCE to determine whether contaminants are present in the groundwater and whether the groundwater is carrying or could carry those contaminants into the river. The SCE concludes that groundwater is or could carry contaminants into the river, but only at concentrations significantly below the SLVs listed in the JSCS. DEQ determines that the pathway is "complete," but no source control actions are needed because SLVs are not exceeded.
- Example 3: Initial investigations of a site near (but not adjacent to) the river indicate that stormwater has the potential to migrate toward the river and carry contaminants. DEQ oversees a SCE to determine whether stormwater is in fact migrating to the river and whether it is or could carry contaminants to the river. The SCE concludes that stormwater is actually not reaching the river and could not reach the river because it is diverted to a stormwater treatment system. DEQ determines that the pathway is "not complete" and no source control actions are needed.

<u>Definition of "Insignificant pathway; no actions recommended"</u>

⁵ See p. 3-1 through 3-6 of the JSCS for more information about SLVs.

The term "insignificant pathway; no actions recommended," is used in Table 1 when (1) the pathway is complete, and (2) contaminant concentrations are near or below SLVs at a point of compliance (e.g., river bank monitoring wells) and are not anticipated to increase.

Use of "N/A" for the pathways

"N/A" is used in Table 1 to indicate that the particular pathway does not exist at the site. For example, for an upland site that is set back from the river (i.e., not adjacent to the river's edge) N/A would indicate that the overland transport/sheet flow, overwater activities, and bank erosion pathways do not exist at the site. For a site that is adjacent to the river, but where a concrete seawall lines the river bank, N/A would indicate that the pathway bank erosion does not exist at the site.

Priority levels for each pathway and site

Each pathway evaluated at each site is given a priority level for source control upon completion of the SCE, or when adequate information exists to determine the pathway's priority. Pathways are prioritized based on their ability to carry contaminants from upland areas to the river at concentrations that exceed SLVs. Each site is then given a priority level based on the highest priority of the pathways. For example, if a site has two low priority pathways and one high priority pathway, the site is determined to be a high priority for source control. Definitions for high, medium and low priority determinations follow.

- High High priority pathways and sites are those where a complete contaminant migration pathway exists and the upland source is significantly impacting the river or poses a significant and imminent threat to the river based on initial evaluation of key source control prioritization factors (listed on p. 4-3 of the JSCS). A primary consideration is that one or more media (soil, groundwater or stormwater) significantly exceed applicable SLVs at the point of discharge to the river (e.g., water at the end of a discharge pipe or soil or material at the riverbank) or the most reliable and cost-effective data point (e.g., groundwater measured at the shoreline), or where a bioaccumulative chemical is detected at concentrations significantly above the SLV. In addition, if an upland source is violating DEQ narrative water quality criteria for the Willamette River, the site may be considered a high priority. High priority sites are expected to move forward with aggressive source control measures without delay or be subject to enforcement action.
- Medium Medium priority pathways and sites are those where a complete contaminant migration pathway exists and the upland source is impacting the river or poses a significant and/or imminent threat to the river based on an initial evaluation of key source control prioritization factors (listed on p. 4-3 of the JSCS). A primary consideration is that one or more media exceed applicable SLVs, but not significantly, at the point of discharge to the river, or where a bioaccumulative chemical is detected at concentrations above the SLV. Although exceedance of SLVs does not necessarily indicate that a site poses a significant and/or imminent threat or needs to immediately implement source control measures, it does indicate that the site may pose a threat to human health or the environment and that additional evaluation may be needed to determine if source control measures are required to prevent, minimize or mitigate the migration of hazardous substances to the river. If the site exceeds one or more SLVs, the need for further characterization or for implementation of source control measures will be based on a site-specific weight-of-evidence determination.

Medium priority sites are expected to perform a weight-of-evidence evaluation to determine if source control measures are required (see p. 4-5 of the JSCS for more information on the weight-of-evidence evaluation).

- Low Low priority pathways and sites are those where upland data indicate, based on an initial evaluation of key source control prioritization factors (listed on p. 4-3 JSCS), that the site likely poses a low threat to the river (e.g., concentrations are near or below SLVs) or where DEQ, in consultation with EPA, may issue an upland "No Further Action" (NFA) determination or lower the State's priority of the site for further upland investigation or remedial action under DEQ's cleanup authority. Source control measures will not be required at low priority sites unless determined necessary by the results of the Portland Harbor RIFS or ROD.
- p High DEQ's preliminary determination is that this is likely a high priority pathway or site based on available information. A final determination of pathway or site priority will be made upon completion of the SCE.
- p Med DEQ's preliminary determination is that this is likely a medium priority pathway or site based on available information. A final determination of pathway or site priority will be made upon completion of the SCE.
- p Low DEQ's preliminary determination is that this is likely a low priority pathway or site based on available information. A final determination of pathway or site priority will be made upon completion of the SCE.

Source Control Decisions and Status of Source Control Measures

The Source Control Decisions (SCDs) and Status of Source Control Measures (SCMs) columns in Table 1 provide information on actions taken or needed to control sources of contamination to the river, including the selected SCMs for each pathway, status of SCM implementation, status of EPA review, and ongoing operation and maintenance requirements.

For many sites listed in Table 1, boxes for information on SCDs and SCMs will be blank because source control work at those sites is still in the evaluation (SCE) phase. Other sites may be in the process of implementing SCMs, and still others may have completed all source control work. For those sites that have completed upland source control and SCMs have been determined to be effective, shading indicates that work is finished at this point in time. Upon completion of the Portland Harbor in-water RIFS, however, DEQ will reevaluate all source control work to ensure that it adequate controlled contaminants to the final cleanup levels developed for the Harbor.

9.1 Acronyms and abbreviations

Agr Agreement

AOC Administrative Order on Consent

AS/SVE Air sparge/soil vapor extraction – a Source Control Measure used to remove

volatile contaminants from groundwater; often combined with treatment measures

AST Above ground Storage Tank

AWQC Ambient Water Quality Criteria BES Bureau of Environmental Services

BIP Burgard Industrial Park
BMPs Best Management Practices
BRA Baseline Risk Assessment

CERCLA Comprehensive Environmental Response, Compensation and Liability Act
COI Contaminant of Interest – chemicals present in Portland Harbor at levels that

could threaten human health and the environment

CSOs Combined-Sewer Overflows

cy Cubic Yard

DEQ Oregon Department of Environmental Quality

ECSI DEQ's Environmental Cleanup Site Information database

EIB Enhanced In-situ Bioremediation EPA Environmental Protection Agency

FS Feasibility Study – a phase of the cleanup process; evaluating cleanup alternatives

after the Remedial Investigation has been completed

FFS Focused Feasibility Study

GW or gw Groundwater

ICP Independent Cleanup Pathway
IGA Inter-Governmental Agreement
IRAM Interim Remedial Action Measure

HVOCs Halogenated Volatile Organic Compounds

IRAM Interim Remedial Action Measure

JSCS Joint Source Control Strategy – issued by DEQ and EPA in December 2005⁶

LNAPL Low density Non-Aqueous Phase Liquid

LWG Lower Willamette Group
MOA Memorandum of Agreement
MOU Memorandum of Understanding

MS4 Municipal Separate Storm Sewer System

N/A Not Applicable – used in Table 1 to indicate that the particular pathway does not

exist at the site

NAPL Non-Aqueous Phase Liquid

N&E Nature and extent of the contamination at the site

NFA No Further Action – a DEQ notice to a Responsible Party declaring that no further

cleanup action is needed at the site

NPDES National Pollutant Discharge Elimination System

NPL National Priority List

OF Outfall

p&t Pump & Treat system – a Source Control Measure used to remove or contain and

treat contaminated groundwater

PA Preliminary Assessment – an early assessment stage of the cleanup process

PCB Polychlorinated Biphenyls

PH Portland Harbor

⁶ The JSCS is available on DEQ's web site at (http://www.deq.state.or.us/lq/cu/nwr/PortlandHarbor/index.htm); click "Joint Source Control Strategy" on the left side bar.

PH Agr Portland Harbor Agreement – a formal agreement to conduct the remedial

investigation and source control work

PH Ltr Agr Portland Harbor Letter Agreement – an initial agreement to conduct limited

investigation and cleanup activities and cover DEQ's oversight costs

PM DEQ Project Manager leading cleanup work at the site

PPA Prospective Purchaser Agreement – a tool for negotiating and agreeing upon

potential liability for prospective purchasers of sites

PRP Potentially Responsible Party.

ROD Record of Decision

RD/RA Remedial Design/Remedial Action – a phase of the cleanup process that occurs

after the Record of Decision; designing and implementing the cleanup action

RI Remedial Investigation – a phase of the cleanup process; investigating the nature

and extent of contamination and understanding the potential risks posed by the

contaminants to human health and the environment

RI/FS Remedial Investigation/Feasibility Study

RM River Mile

RP Responsible Party SC Source Control

SCD Source Control Decision
SCE Source Control Evaluation
SCM Source Control Measure
SIC Schnitzer Investment Corp

SLV Screening Level Value – a contaminant-specific level established in the JSCS (see

JSCS Table 3.1) that is used to screen upland pathways and sites to identify

potential threats to human health and the environment.

SOW Scope of Work

SVE Soil Vapor Extraction – a Source Control Measure used to remove volatile

contaminants from subsurface soils; often combined with soil vapor treatment

TBD To Be Determined TCA Trichloroethane

UIC Underground Injection Control system

UST Underground Storage Tank
VCP Voluntary Cleanup Program
VOCs Volatile Organic Compounds

WO Waiting on

XPA Expanded Preliminary Assessment – an early assessment stage of the cleanup

process

9.2 Contact information for DEQ Project Managers

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	-111/11/11		mation	ources of	contamination to the Project	t status				Source Cor	trol Evalu	uation (SCE)				Source	Control	Decisions	(SCDs) an	d Status o	f Source Co	ntrol M	leasures	(SCMs)
		ni.			Type of agreement		Date last					Basis for determination		e control							Additional Proposed			(como)
ite name	ECSI#	River	Address	DEQ PM	directing source control	Project status	modified (m-d-y)	SCE Pathway	Status of SCE	Major SCE tasks to be completed	Schedule for completing SCE	Pathway determination	Pathway priority	priority	Status of EPA review of SCE decision	Source control alternatives evaluation and schedule (m-y)	Selected SCMs	Status of EPA review of SCM selection decision	SCM activities completed to date (m-y)	Mass or volume of contaminants controlled	SCM activities to be done and schedule (m- y)	Date SCM completed (m-y)	Status of EPA review of completed SCM	Operaton and maintenance requirements
erminal 5	1686	1.5 E	15540, 15550, & 15560 N Lombard	Tom Gainer	IGA	NFA	02/19/09	Overland Transport/Sheet Flow	N/A	NA NA	N/A	N/A	none	level	N/A	N/A	NA NA	NA NA	NA NA	NA NA	NA NA	NA .	NA NA	NA NA
erminal 5	1686	1.5 E	15540, 15550, & 15560 N Lombard	Tom Gainer	IGA	NFA	02/19/09	Bank Erosion	N/A	NA NA	N/A	N/A	none		N/A	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA	NA NA	NA
erminal 5	1686	1.5 E	15540, 15550, & 15560 N Lombard	Tom Gainer	IGA	NFA	02/19/09	Groundwater	Completed	NA NA		Insignificant pathway; no actions recommended	Low		SCE submitted to EPA 6/07 - EPA comments received				AL DESCRIPTION OF					
erminal 5	1686	1.5 E	15540, 15550, & 15560 N Lombard	Tom Gainer	IGA	NFA	02/19/09	Stormwater	Completed	NA		Insignificant pathway, no actions recommended	Low	Low	6/07 SCE submitted to EPA 6/07 - EPA comments received									
erminal 5	1686	1.5 E	15540, 15550, & 15560 N Lombard	Tom Gainer	IGA	NFA	02/19/09	Overwater Activities	N/A	N/A	N/A	N/A	none		6/07 N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
erminal 5	1686	1.5 E	15540, 15550, & 15560 N Lombard	Tom Gainer	IGA	NFA	02/19/09	Other	N/A	N/A	N/A	N/A	none		N/A	N/A	NA	N/A	N/A	N/A	N/A	N/A	N/A	N/A
gon Steel Milts	141	22E	14400 N Rivergate	Jennifer Sutter	PH Agr for RI/SCM (6/00)	RI	08/03/10	Overland Transport/Sheet Flow	N/A	N/A	N/A	no pathway, berm prevents overland transport/sheel flow	None		N/A	N/A	NA	N/A	N/A	N/A	NA	N/A	N/A	N/A
gon Steel Milis	141	22E	14400 N Rivergate	Jennifer Sutter	PH Agrifor RVSCM (6/00)	RI	08/03/10	Bank Erosion	Completed		SCE is part of June 06 Alternatives Evaluation	Pathway is complete	High		Deferred to Alternatives Evaluation	Original permit for shoreline action withdrawn based on Agency input. New permit with modified design to be submitted once additional shoreline sampling results evaluated.		Evaluating path Jorward considering EPA-Natural Resource Trustee comments						
gon Steel Mils	141	22E	14400 N Rivergate	Jennifer Sutter	PH Agr for RYSCM (6/00)	RI	68/03/10	Groundwater (UST & AST AOCs)	Completed			insignificant pathway, no actions recommended	Low		SCE submitted to EPA 10/2004; no comments received		Soil removal completed at time of spill, prior to SCE						SCE submitted to EPA 10/2004: no comments received	Operation an Maintenance requirements
gon Steel Milis	141	2.2.E	14400 N Rivergate	Jennifer Sutter	PH Agrior RVSCM (6/00)	RI	08/03/10	Groundwater (other AOCs)	Ongoing	DEQ SCE memo for EPA in preperation	1st qtr 2011	Pathway is complete	Medium	High	Pending completion of SCE									
gon Steet Mils	141	22E	14400 N Rivergate	Jennifer Sutter	PHAgrfor RI/SCM (6:00)	RI	08/03/10	Stormwater	Completed			Pathway is complete	High		SCE is part of Alternatives Evaluation	alternative evaluation completed 2006.	End of pipe treatment	EPA agreed with proposed approach 9/14/06	Full-scale plot operating 10/07; end of pipe treatment expanded to central outfall Fall 2008; loading evaluation approved 2010 however, evaluating appropriate treatment chemical		pilot testing completed, loading evaluation approved 2010, evaluating treatment chemical			
gon Steel Milis	141	22E	14400 N Rivergate	Jennifer Sutter	PH Agrifor RVSCM (6/00)	RI	08/03/10	Overwater Activities	N/A	N/A	N/A	No known current sources (spills reported to OERS)	none		NA	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
gan Steel Milis	141	22E	14400 N Rivergate	Jennifer Sutter	PH Agr for RVSCM (6/00)	RI	08/03/10	Other - current NPDES permitted discharge	Completed	N/A-	Addressed under NPDES permit	Pathway addressed via NPDES permit	none		N/A	NIA	N/A	N/A	N/A	N/A	NA	N/A	N/A	N/A
o Landfill ive Island	4409	2.6	14444 NW Gillihan Loop	No PM Assigned	Industrial landfill disposal permit	Solid Waste Landfill Permit	08/20/08	Overland Transport/Sheet Flow	N/A	N/A	N/A	NA	none			N/A	NA	N/A	N/A	N/A	N/A	N/A	N/A	NA
o Landfill ive Island	4409	2.6	14444 NW Gillihan Loop	No PM Assigned	industrial landfill disposal permit	Solid Waste Landfill Permit	08/20/08	Bank Erosion	NA	N/A	NA	N/A	none		Little and	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
o Landfill ive Island	1409	2.8	14444 NW Gällhan Loop	No PM Assigned	industrial landfill disposal permit	Solid Waste Landfill Permit	08/20/08	Groundwater	N/A	N/A	N/A	N/A	none	The state of the s		N/A	N/A	N/A	N/A	NA	NA	N/A	N/A	N/A
o Landfill ive Island	1409	2.6	14444 NW Gillihan Loop	No PM Assigned	Industrial landfill disposal permit	Solid Waste Land@I Permit	08/20/08	Stormwater	N/A	NIA	N/A	NA	none	Low		N/A	N/A	N/A	N/A	NA	N/A	N/A	N/A	N/A
o Landfill ive Island	1409	2.8	14444 NW Gillihan Loop	No PM Assigned	industrial landfill disposal permit	Solid Waste Landfül Permit	08/20/08	Overwater Activities	N/A	N/A	NA	NA	none			N/A	N/A	NA	N/A	N/A	N/A	N/A	N/A	NA
o Landfill ive Island	1409	2.6	14444 NW Gillhan Loop	No PM Assigned	Industrial landfill disposal permit	Solid Waste Landfill Permit	08/20/08	Other	N/A	N/A	NA	N/A	none			NA	N/A	N/A	N/A	NA	NA	N/A	NA	N/A
solidated Vetoo	295	2.8 E	3940 N Rivergate	Mike Romero	PH Letter Agr for XPA	ХРА	06/30/10	Overland Transport/Sheet Flow	N/A	N/A	N/A	N/A	none		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A.
solidated Metco	295	2.8 E	3940 N Rivergate	Mike Romero	PH Letter Agr for XPA	XPA	06/30/10	Bank Erosion	N/A	N/A	N/A	N/A	none		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

(-	ned or s		urces of	contamination to the	V (1) (1) (1)	\exists			Source Conf	trol Evalu	ation (SCE)				Source	Control	Decisions	(SCDs) an	d Status of	Source Cor	ntrol M	easures	(SCMs)
Site name		River mile	Address	DEQ PM	Type of agreement directing source control	Project status	Date last modified (m-d-y)	SCE Pathway	Status of SCE	Major SCE tasks to be completed	Schedule for completing SCE	Basis for determination is nee Pathway determination	ded Pathway	Site priority level	Status of EPA review of SCE decision	Source control alternatives evaluation and schedule (m-y)	Selected SCMs	Status of EPA review of SCM selection decision	SCM activities completed to date (m-y)	Mass or volume of contaminants controlled	Additional Proposed SCM activities to be done and schedule (m- y)	Date SCM completed (m-y)	Status of EPA review of completed SCM	Operaton and maintenance requirements
Consolidated Metco	3295	2.8 E	3940 N Rivergate	Mike Romero	PH Letter Agr for XPA	XPA	06/30/10	Groundwater	Completed	None	N/A	Incomplete pathway	none		Anticipate providing SCE to EPA 2nd Otr 2011									
Consolidated Metco	3295	2.5 E	3940 N Rivergate	Mike Romero	PH Letter Agr for XPA	ХРА	06/30/10	Stormwater	Completed			Complete	Medium	Medium	Anticipate providing SCE to EPA 2nd Qtr 2011		Cleaned stormsewer lines, proposed line repair options and post SCM monitoring plan.		Stormwater system repair completed 2nd quarter 2010		Performance monitoring ongoing - anticipate providing EPA summary of remedy effectiveness 2nd Qtr 2011			
Consolidated Metco	3295	2.8 E	3940 N Rivergate	Mike Romero	PH Letter Agr for XPA	XPA	06/30/10	Overwater Activities	N/A	N/A	N/A	NA	none		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Consolidated Metco	3295	2.8 E	3940 N Rivergate	Mike Romero	PH Letter Agr for XPA	XPA	06/30/10	Other	N/A	N/A	N/A	N/A	nore	-	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
GE Harborton	2353	32W	NW Marina Way	Matt McClincy	PH Agr for RI/SCM (6/00)	Completed SCD	03/06/06	Overland Transport/Sheet Flow	N/A	N/A	N/A	N/A	none	Total Park	NA	N/A	N/A	N/A	N/A	N/A	NA	NA	N/A	N/A
GE Harborton	2353	3.2 W	NW Marina Way	Matt McClincy	PH Agr for RVSCM (6/00)	Completed SCD	03/06/06	Bank Erosion	Completed			Insignificant pathway, no actions recommended	Low		EPA reviewed and commented 5/04		No SCM needed							
PGE Harborton	2353	3.2 W	NW Marina Way	Matt McClincy	PH Agr for RVSCM (6/00)	Completed SCD	03/06/06	Groundwater	Completed			insignificant pathway; no actions recommended	Low		EPA reviewed and commented 5/04		No SCM needed					70	5	
PGE Harborton	2353	3.2 W	NW Marina Way	Matt McClincy	PH Agr for RVSCM (6/00)	Completed SCD	03/06/06	Stormwaler	Completed			Insignificant pathway; no actions recommended	Lov	Low	EPA reviewed and commented 5/04		No SCM needed					Non.		
PGE Harborton	2353	3.2 W	NW Marina Way	Matt McClincy	PH Agr for RVSCM (5/00)	Completed	03/06/06	Overwater Activities	NA	N/A	N/A	NIA	none	1200	NA	N/A	N/A	N/A	N/A	N/A	N/A	NA	NA	N/A
PGE Harbortor	2353	3.2W	NW Marina Way	Matt McClincy	PH Agr for RVSCM (6/00)	Completed	03/06/08	Other	N/A	N/A	N/A	N/A	none		NIA	N/A	N/A	NA	N/A	N/A	N/A	N/A	N/A	NA
Time Oil	170	3.4 E	10350 Time Of	00000000	Pre-PH Agr. (9/96)	BRA	07/06/10	Overland Transport/Sheet Flow	Completed	None	First Quarter 2011	Incomplete pathway	none		SCE will be submitted to EPA when stormwater assessment is complete									
Time Oil	170	3.4 E	10350 Time Oil Rd	Ken Thiessen	Pre-PH Agr. (9/96)	BRA	07/06/10	Bank Erosion	Completed	None	First Quarter 2011	Insignificant pathway, no actions recommended	pLow		SCE will be submitted to EPA when stormwater assessment is complete									
Time Oil	170	3.4 E	10350 Time Oil Rd	Ken Thiessen	Pre-PH Agr. (9/96)	BRA	07/06/10	Groundwater (Main Tank Farm Petroleum Plume)	Completed	None	First Quarter 2011	Pathway is complete. GW Monitoring ongoing	Medium		SCE will be submitted to EPA when stormwater assessment is complete	Work plan for soil removel in tank farm area in review	Impacted source area soil to be removed							
Time Oil	170	3.4 E	10350 Time Oil Rd	Ken Thiessen	Pre-PH Agr. (9/96)	BRA	07/06/10	Groundwater (Bell Terminal Patroleum Plume)	Completed	None	First Quarter 2011	Pathway is incomplete. GW Monitoring engoing	pLow		SCE will be submitted to EPA when stormwater assessment is complete									
Time Oil	170	3.4 E	10350 Time Oi Rd	Ken Thiessen	Pre-PH Agr. (9/96)	BRA	07/06/10	Groundwater (Penta Plume)	Completed			SCMs retard penta migration and prevent penta discharge to private stormwater outfall	Medium	Medulii	SCE submitted to EPA.	alternatives evaluation completed 2004	Source area pump & treat; instu chemical oxidation (ISCO) gw to sw intercept pump-treat, plans for additional source area sof removin development	selection submitted to EPA May 2004; partners responded with questions	rounds of ISCO	and treated, ISCO	TBD - bioremediation methods being tested	n		Ongoing maintenance and monitoring of pump- treat system
Time Oil	170	3.4 E	10350 Time O	Ken Thlessen	Pre-PH Agr. (9/96)	BRA	07/06/10	Stormwater	Ongoing	Complete stormwater characterization	4th Quarter 2010	Pathway is complete	pLow		Waiting on SCE phase to be completed									
Time Oil	170	3.4 E	10350 Time O	Ken Thiessen	Pre-PH Agr. (9/96)	BRA	07/06/10	Overwater Activities	N/A	N/A	N/A	No known current sources (no spills reported to OERS)	none		N/A	N/A	N/A	N/A	NA	N/A	N/A	N/A	N/A	N/A
Time Oil	170	3.4 E	10350 Time O Rd	Ken Thiessen	Pre-PH Agr. (9/96)	BRA	07/06/10	Other	N/A	N/A	N/A	N/A	none		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
City of Portland Outfalls	visriou	3.5 to 9.2	VBFROUS	Karen Tarnow	IGA for RI SCM (8/63	n) Ri	08/05/10	Overland Transport/Sheet Flow	N/A	N/A	NA	N/A	none		N/A	N/A	N/A	N/A	N/A	N/A	NIA	NIA	N/A	N/A
City of Portland Outfalls	verior 3	9.5 to	Verlous	Karen Tamow	IGA for RI SCM (8/03	n) Ri	08/05/10	Bank Erosion	N/A	N/A	N/A:	NA	none		N/A	N/A	N/A	NA	N/A	N/A	NA	N/A	N/A	N/A
City of Portland Outfalls	variou	3.5 %	Various	Karen	IGA for RI SCM (8/03	s) Ri	08/05/10	Groundwater	N/A	NA	NA	N/A	none		N/A	N/A	N/A	N/A	NIA	N/A	N/A	N/A	N/A:	N/A

				ources of	contamination to t					Source Con	trol Evalu	ration (SCF)				Source	Control	Docisions	(SCDs) as	d Status a	f Course Co	-41 N		(COM-)
	Siti	e intor	mation	T		t status				000100 0011	LIOI EVAIL	Basis for determination	on that source	e control		Source	Control	Decisions	(SCDS) ar	id Status o	f Source Co	itroi iv		(SCIVIS)
Site name	ECSI#	River mile	Address	DEQ PM	Type of agreement directing source control	Project status	Date last modified (m-d-y)	SCE Pathway	Status of SCE	Major SCE tasks to be completed	Schedule for completing SCE	is nee	Pathway		Status of EPA review of SCE decision	Source control alternatives evaluation and schedule (m-y)	Selected SCMs	Status of EPA review of SCM	SCM activities completed to date	Mass or volume of contaminants	Additional Proposed SCM activities to be done and schedule (m-	Date SCM completed	Status of EPA review of completed	Operaton and maintenance
							3 4.9/					determination	priority level	priority level	decision	and schedule (m-y)	Final SCM TBD.	selection decision	(m-y)	controlled	A)	(m-y)	SCM	requirements
City of Portland Outfails	versou 9	2.5 to 9.2	verious	Karen Tamow	IGA for RI SCM (B/03)	RI	08/05/10	Stormwater	Ongoing	Complete outfall basin characterizations, site-specific investigations and source control.	Ongoing (corresponding to Portland Harbor ROD)	Pathway is complete; priority varies from basin to basin	to be determined	to be determin ed	Wating on SCE to be completed.		Cogoing SW inspections, investigations of Rict discharges, identification of potential contributors to City system. Site-specific catch basin cleanouts, line cleaning, and implementation of BMPs							
City of Portland Outfalls	yeriou 3	9.2	Various	Karen Tarnow	IGA for RI SCM (8/03)	RI	08/05/10	Overwater Activities	N/A	N/A	N/A	N/A	none		NA	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Olty of Portland Outfalls	veriou 6	3.5 to 9.2	various	Karen Tarnow	IGA for RI SCM (8/03)	RI	08/05/10	Other	N/A	N/A	NA	N/A	none		NA	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Georgia Pacific Linnton	2370	3.5 W	12222 NW Marina	Tom Gainer	PH Letter Agr for XPA (10/99)	XPA	08/12/08	Overland Transport/Sheet Flow	Completed			Insignificant pathway, no actions recommended	Low		EPA reviewed in 2000 and did not provide comments		No SCM needed							
Georgia Pacific Linnton	2370	3.5 W	12222 NW Marina	Tom Gainer	PH Letter Agr for XPA (10/99)	ХРА	06/12/06	Bank Erosion	N/A	N/A	- N/A	N/A	none		N/A	N/A	NA	N/A	N/A	N/A	N/A	N/A	N/A	NA
Georgia Pacific Liniton	2370	35W	12222 NW Marina	Tom Gainer	PH Letter Agr for XPA (10/99)	XPA	06/12/06	Groundwater	Completed	10/2001 DEQ concluded not a current source. \$2002 DEQ requesteded adfisional groundwater work based on new PH strategies. \$2002- GP declined. DEQ considers groundwater pathway not fully characterized, but not a high priorty.			Low	Low	EPA reviewed in 2000 and did not provide comments	NA	No SCM needed	NA	NA	NA	NA .	NA NA	NA NA	N/A
Georgia Pacific Linnton	2370	3.5 W	12222 NW Marina	Tom Gainer	PH Letter Agr for XPA (10/99)	XPA	06/12/06	Stormwater	N/A	N/A	N/A	N/A	none	183	NA	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Georgia Pacific Linaton	2370	3.5 W	1,2222 NW Marina	Tom Gainer	PH Letter Agr for XPA (10/99)	XPA	06/12/08	Overwater Activities	N/A	N/A	N/A	No known current sources (spills reported to OERS)	none		NA	N/A	N/A	N/A	N/A	N/A	N/A	N/A	NA	N/A
Georgia Pacific Linnton	2370	3.5 W	12222 NW Marina	Tom Gainer	PH Letter Agr for XPA (10/99)	ХРА	06/12/06	Other	N/A	N/A	N/A	NA	none		N/A	N/A	N/A	N/A	NA	N/A	N/A	N/A	N/A	N/A
ACF Industries	794	3.5 W	12160 NW St Helens	Dan Hafley	Unilateral Order (6/00)	NFA	11/28/06	Overland Transport/Sheet Flow	N/A	N/A	N/A	N/A	none		N/A	NA	N/A	N/A	N/A	N/A	N/A	NA	N/A	N/A
ACF Industries	794	3.5 W	12160 NW St Helens	Dan Haffey	Unitateral Order (8/00)	NFA	11/28/06	Bank Erosion	N/A	N/A	N/A	N/A	none	bar	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
ACF Industries	794	3.6 W	12160 NW St Helens	Dan Haffey	Unitateral Order (8/00)	NEA	11/28/06	Groundwater	Completed			Insignificant pathway, no actions recommended	Low		SCE submitted to EPA (10/04); no comments		No SCM needed						SCM submitted to EPA (10/04). No comments.	
ACF Industries	794	3.8 W	12160 NW St Helens	Dan Haffey	Unilateral Order (8/00)	NFA	11/28/06	Stormwater	Completed			Currently insignificant pathway, stormwater pipe suspected past imigration pathway	Low	Low	SCE submitted to EPA (10/04); no comments		Completed FS proposes removal of contaminated off-site soil potentially available for transport to river.	SCM submitted to EPA (10.04). No comments	6,400 tons of contaminated soil removed in 2006 and site capped with 1.5 feet of clean fill in 2007				SCM submitted to EPA (10/04) No comments	
ACF Industries	794	3.6 W	12160 NW St Helens	Dan Hafley	Unifateral Order (8/00)	NFA	11/28/06	Overwater Activities	N/A	NA NA	N/A	N/A	none		N/A	N/A	N/A	N/A	N/A	NA	N/A	N/A	N/A	N/A
ACF industries	794	3.6 W	12160 NW St Helens	Dan Hafley	Unilateral Order (8/00)	NFA	11/28/06	Other	N/A	NA	NA	NA	none		N/A	NA	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Linnton Oil Fire Training Grounds		3.6 W	NW Marina Way	Torn Gainer	IGA - III	NFA	03/02/06	Overland Transport/Sheet Flow	Completed			Insignificant pathway, no actions recommended	Low		Complete									
Linnton Oil Fire Training Grounds	1189	3.5 W	NW Marina Way	Tom Gainer	KSA	NFA	03/02/06	Bank Erosion	Completed			Insignificant pathway, no actions recommended	Low		Complete									
Linnton OI Fire Training Grounds		3.6 W	NW Marina Way	Tom Gainer	KSA	NFA	03/02/06	Groundwater	Completed			Currently no complete pathway, groundwater monitoring to confirm plume stability	Low		Complete									Annual groundwater monitoring (conditional NFA)

			suspected so	ources of	contamination to the					Source Con	trol Evalu	ation (SCE)				Source	Control	Decisions	(SCDs) an	d Status o	f Source Co	ntrol M	easures	(SCMs)
	Site		nation		Type of agreement		Date last		Status of	Major SCE tasks to be	Schedule for	Basis for determination is nee		control	Status of EPA	Source control		Status of EPA	SCM activities	Mass or volume of	Additional Proposed SCM activities to be	Date SCM completed	Status of EPA review of	Operaton and maintenance
Site name	ECSI#	River mile	Address	DEQ PM	directing source control	Project status	modified (m-d-y)	SCE Pathway	SCE	completed	completing SCE	Pathway determination	Pathway priority level	Site priority level	review of SCE decision	alternatives evaluation and schedule (m-y)	Selected SCMs	review of SCM selection decision	completed to date (m-y)	contaminants controlled	done and schedule (m- y)	(m-y)	completed SCM	requirements
innton Oil Fire Training Grounds	1189	3.6 W	NW Marina Way	Tom Gainer	IGA	NFA	03/02/06	Stormwater	Completed			Insignificant pathway, no actions recommended	Low		Complete									
innton Oil Fire Training Grounds	1189	3.6 W	NW Marina Way	Tom Gainer	IGA	N/A	03/02/06	Overwater Activities	NA	N/A	NIA	NA	none		N/A	N/A	N/A	NA	N/A	NA	NA	N/A	NA	N/A
innton Oil Fire Training Grounds	1189	3.5 W	NW Marina Way	Tom Gainer	KGA	N/A	03/02/06	Other	N/A	N/A	N/A	NA	none		N/A	N/A	N/A	N/A	N/A	N/A	N/A	NA	N/A	NA
Premier Edible Ols	2013	36E	10400 N Burgard	Ken Thlessen	PH Agr for RUSCM (7/01)	Ri	07/06/10	Overland Transport/Sheet Flow	Ongoing	To be evaluated as part of stormwater evaluation	Estimated Fourth Quarter 2011	Pending	plow	High										
Premier Edible Oils	2013	3.6 E	10400 N Burgard	Ken Thiessen	PH Agr for RVSCM (7/01)	RI	07/08/10	Bank Erosion	Ongoing	Additional sampling needed	Estimated Fourth Quarter 2011	Pending	pLow											
Premier Edible Olls	2013	3.6 E	10400 N Burgard	Ken Thiessen	PH Agr for RVSCM (7/01)	RVSCE	07/06/10	Stormwaler	Ongoing	Complete stormwater system characterization	Estimated Fourth Quarter 2011	Pending	p.Low			N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Premier Edible Oils	2013	3.6 E	10400 N Burgard	Ken Thiessen	PH Agr for RVSCM (7/01)	RVSCE	07/06/10	Overwater Activities	Ongoing	N/A	N/A	NA .	none		N/A	N/A	NA	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Premier Edible Oits	2013	3.8 E	10400 N Burgard	Ken Thiessen	PH Agr for RI/SCM (7/01)	RIVSCE	07/06/10	Groundwater and LNAPL to surface water at site shoreline	Completed	None	N/A adequate documentation exists	Complete	High			SCM Evaluation (FFS) is preparation	1							
RoMar Realty of Oregon	2437	3.6 E	9333 N Time Oil	Tom Gainer	PH Lir Agr for XPA	NFA	06/12/06	Overland Transport/Sheet Flow	Completed			Insignificant pathway, no actions recommended	Low		SCE submitted to EPA (3/06); DEQ responds 4/06									
RoMar Realty of Oregon	2437	3.6 E	9333 N Time Oil	Tom Gainer	PH Lir Agr for XPA	NFA	06/12/06	Bank Erosion	Completed			Insignificant pathway; no actions recommended	Low		N/A			TOP ST						
RoMar Realty of Oregon	2437	3.6 E	9333 N Time Oil	Tom Gainer	PH Lir Agr for XPA	NFA	05/12/05	Groundwater	Completed			insignificant pathway; no actions recommended	Low	Low	SCE submitted to EPA (3/06); DEQ responds 4/06									
RoMar Realty of Oregon	2437	3.8 E	9333 N Time Oil	Tom Gainer	PH Ltr Agr for XPA	NFA	06/12/06	Stormwater	Completed			Insignificant pathway, no actions recommended	Low		SCE submitted to EPA (3/06); DEQ responds 4/06		100						1	
RoMar Realty of Oregon	2437	3.6 E	9333 N Time Oil	Tom Gainer	PH Lir Agr for XPA	NFA	05/12/05	Overwater Activities	NA	NA	NA	N/A	none		NA	N/A	NA	NA	N/A	N/A	N/A	N/A	N/A	N/A
RoMar Realty of Oregon	2437	3.6 E	9333 N Time Oil	Tom Gainer	PH Ltr Agr for XPA	NFA	06/12/06	Other	N/A	N/A	N/A	N/A	none	TOTAL STREET	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	NA	N/A
Jefferson Smurfk	2371	3.7 E	9930 N Burgard	Matt McClincy	PH Letter Agr for XPA (12/00)	ХРА	03/06/06	Overland Transport/Sheet Flow	N/A	N/A	N/A	N/A	none		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Jefferson Smurfit	2371	3.7 E	9930 N Burgard	Matt McClincy	PH Letter Agr for XPA (12/00)	XPA	03/06/06	Bank Erosion	N/A	NA	NA	N/A	none	100	N/A EPA Reviewed and	N/A	N/A	N/A	NA	N/A	N/A	N/A	N/A	N/A
Jefferson Smurfit	2371	3.7 E	9930 N Burgard	Matt McClincy	PH Letter Agr for XPA (12/00)	XPA	03/06/06	Groundwater	Completed	THE RESERVE		Insignificant pathway; no actions recommended	Low	Mag	10/20/02	ALL CONTRACT	No SCM needed		SE CO	57 CON # 10	O STEEL STATE	I MINI		
Jefferson Smurft	2371	3.7 €	9930 N Burgard	Matt McClincy	PH Letter Agr for XPA (12/00)	XPA	03/06/06	Stormwater	Completed	PARTIE STATE OF THE PARTIES AND THE PARTIES AN	No.	Insignificant pathway; no actions recommended	LOW	Low	EPA Reviewed and commented		No SCM neede		The same	BEAL OF	War with		1	
Jefferson Smurfit	2371	3.7 E	9930 N	Matt McClincy	PH Letter Agr for XPA (12/00)	XPA	03/06/06	Overwater Activities	N/A	N/A	N/A	NA	none		10/20/02 N/A	N/A	N/A	N/A	N/A	NA	N/A	N/A	N/A	N/A
Jefferson Smurfit	2371	3.7 E	9930 N Burgard	Matt McClincy	PH Letter Agr for XPA (12/00)	XPA	03/06/06	Other	N/A	N/A	N/A	NA	none		NA	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Owens- Coming Fiberglass (Trumbull Asp	1038	3.8 W	MALE NILLS	Shawn Rapp	PH Letter Agr for XPA (12/99)	XPA	07/01/10	Overland Transport/Sheet Flow	Ongoing	Review draft SCE	4th Qtr 2010	Insignificant pathway; no actions recommended	plow	704	Pending completion of SCE				Ennati					12/18/2016
Owens- Corning Fiberglass (Trumbuil Ass	1036	3.8 W	11444 NW St Helens	Shawn Rapp	PH Letter Agr for XPA (12/99)	XPA	07/01/10	Bank Erosion	Ongoing	Review draft SCE	4th Qtr 2010	Insignificant pathway; no actions recommended	plow		Pending completion of SCE	n				20021		THE STATE OF		
Owens- Corning Fiberglass (Trumbull Ass	1036) SW	11444 NW St Helens	Shawn Rapp	PH Letter Agr for XPA (12/99)	ХРА	07/01/10	Groundwater	Ongoing	Review draft SCE	4th Qtr 2010	insignificant pathway; no actions recommended	plow	PLow	Pending completion of SCE	n	De la			THE STATE OF		1		
Owens- Corning Fiberglass (Trumbull Ass		3.8 W	11444 NW St Helens	Shawn Rapp	PH Letter Agr for XPA (12/99)	XPA	07/01/10	Stormwater	Ongoing	Review draft SCE	4th Otr 2010	Waiting on SCE to be completed	plow	2.210	Pending completion of SCE	n				a Carrie				
Owens- Corning Fiberglass (Trumbull Ass	1038	3.8 W	11444 NW St Helens	Shawn Rapp	PH Letter Agr for XPA (12/99)	хра	07/01/10	Overwater Activities	N/A	N/A	N/A	N/A	none		N/A	N/A	N/A	NA	NA	N/A	N/A	N/A	N/A	N/A

			suspected s	ources of	contamination to t	he river				Source Con	trol Evalu	ation (SCE)				Source	Control	Decisions	(SCDe) ar	d Statue o	f Source Cor	atrol M	oneuroe.	(SCMa)
	Site		mauon		Type of agreement		Date last					Basis for determination		e control			Control				Additonal Proposed		Status of EPA	(SCIVIS)
Site name	ECSI#	River	Address	DEQ PM	directing source control	Project status	modified (m-d-y)	SCE Pathway	Status of SCE	Major SCE tasks to be completed	Schedule for completing SCE	Pathway determination	Pathway priority level	Site priority level	Status of EPA review of SCE decision	Source control alternatives evaluation and schedule (m-y)	Selected SCMs	Status of EPA review of SCM selection decision	SCM activities completed to date (m-y)	Mass or volume of contaminants controlled	SCM activities to be done and schedule (m- y)	Date SCM completed (m-y)	review of completed SCM	Operaton and maintenance requirements
Owens- Corning Fiberglass (Trumbull Asp	1038	3.8 W	11444 NW St Helena	Shawn Rapp	PH Letter Agr for XPA (12/99)	ХРА	07/01/10	Other	NA	N/A	N/A	N/A	none		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	NA	N/A
Schnitzer Burgard Industrial Park	5324	3.8 E	12005 N Burgard	Jim Orr	PH Agr for RVSCM (3/00)	RI	07/29/10	Overland Transport/Sheet Flow	Ongoing	Investigation scope of work under review	TBO	Waiting on SCE to be completed	p High		Waiting on SCE completion									
Schnitzer Burgard Industrial Park	5324	38E	12005 N Burgard	Jim Orr	PH Agr for RVSCM. (3/00)	RI	07/29/10	Bank Erosion	Ongoing	Additional sampling needed	TBD	Waiting on SCE to be completed	p Med		Waiting on SCE completion									7
Schnitzer Burgard Industrial Park		3.8 E	12005 N Burgard	Jim Orr	PH Agrifor RVSCM (3/00)	RI	07/29/10	Groundwater	Ongoing	Additional groundwater characterization	TBD	Waiting on SCE to be completed	p Med	pHigh	Waiting on SCE completion									
Schnitzer Burgard Industrial Park		3.8 E	12005 N Burgard	Jim Ort	PH Agr for RI/SCM (3/00)	Ri	07/29/10	Stormwater	Ongoing	Additional stormwater characterization	ТВО	Wating on SCE to be completed	p High		Waiting on SCE completion									
Schnitzer Burgard Industrial Park	5324	3.8 E	12005 N Burgard	Jim Orr	PH Agr for RISCM (\$/00)	RI	07/29/10	Overwater Activities	N/A	N/A	N/A	N/A	NA		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Schnitzer Burgard Industrial Park	5324	3.8 E	12005 N Burgard	Jim Orr	PH Agr for RVSGM (3/00)	RI	07/29/10	Other	N/A	N/A	NA	N/A	N/A		N/A	N/A	NA	N/A	N/A	:N/A	N/A	N/A	N/A	N/A
NW Pipe	138	3.9 E	12005 N Burgard	Jim Orr	PH Agr for RVSCM (2/05)	RI	07/29/10	Overland Transport/Sheet Flow	N/A	N/A	N/A	N/A	N/A		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
NW Pipe	138	3.9 E	12005 N Burgard	Jim Orr	PH Agr for RI/SCM (2/05)	RI	07/29/10	Bank Erosion	N/A	N/A	N/A	N/A	none		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
NW Pipe	138	3.9 E	12005 N Burgard	Jim Orr	PH Agr for RVSCM (2/05)	RI	07/29/10	Groundwater	Ongoing	SCE report in revision	4th Quarter 2011	Not believed to be a complete pathway	none		Waiting on SCE to be completed									
NW Pipe	138	3.9 E	12005 N Burgard	Jim Orr	PH Agr for RVSCM (2/05)	RI	07/29/10	Stormwater	Ongoing	SCE report in revision	4th Quarter 2011	SW suspected migration pathway	p Med	p Med	Walling on SCE to be completed									
NW Pipe	138	3.9 E	12005 N Burgard	Jim Orr	PH Agr for RVSCM (2/05)	Ri	07/29/10	Overwater Activities	N/A	N/A	N/A	N/A	none		N/A	N/A	N/A	N/A.	N/A	N/A	N/A	N/A	N/A	N/A
NW Pipe	138	3.9 E	12005 N Burgard	Jim Orr	PH Agr for RVSCM (2/05)	RI	07/29/10	Other	N/A	N/A	N/A	N/A	none		N/A	N/A	N/A	N/A	N/A	NA	N/A	N/A	N/A	N/A
Schnitzer Stee	2355	4.0 E	12005 N Burgard	Jim On	PH Agr for RVSCM (\$400)	RI	07/29/10	Overland Transport/Sheet Flow	Ongoing	Additional sampling needed	4th Quarter 2011	Waiting on SCE to be completed	p High		Walting on SCE to be completed				Asphalt berm constructed in summer 2009 along 925 feet of landward edge of Schnitzer dock to help prevent overland runoff to slip					
Schnitzer Stee	2355	4.0 E	12005 N Burgard	Jim Orr	PH Agr for RI/SCM (3/00)	RI	07/29/10	Bank Erosion	Ongoing	Additional sampling needed	4th Quarter 2011	Waiting on SCE to be completed	p Med		Walting on SCE to be completed									
Schnitzer Stee	2355	40E	12005 N Burgard	Jim Orr	PH Agr for RI/SCM (3/00)	Rí	07/29/10	Groundwater	Ongoing	angoing maniforing	4th Quarter 2011	Waiting on SCE to be completed	p Med	p High	Waiting on SCE to be completed									
Schnitzer Steel	2355	4.0 E	12005 N Burgard	Jim Orr	PH Agr for RVSCM (3/00)	RI	07/29/10	Stormwater	Ongoing	Ongoing monitoring - and engineering improvements including stormwater fitration and storage	4th Quarter 2011	Complete	p High		Waiting on SCE to be completed		Signicant stormwater system uptgrades in progress							
Schnitzer Stee	2355	4.0 E	12005 N Burgard	Jim Orr	PH Agr for RI/SCM (3/00)	RI	07/29/10	Overwater Activities	Not Started	To be determined	4th Quarter 2011	Waiting on SCE to be completed	p Med		Waiting on SCE to be completed									
Schnitzer Stee	2355	4.0 E	12005 N Burgard	Jim Orr	PH Agr for RI/SCM (3/00)	Ri	07/29/10	Air Deposition	Not Started	To be determined	4th Quarter 2011	Walting on SCE to be completed	p Med		Waiting on SCE to be completed					Total Control				THE RE
Kinder Morgan (Aka GATX)	1096	42W	11400 NW St Helens	Mike Romero	PH Agr for RI/CSM (3/00)	RI	06/30/10	Overland Transport/Sheet Flow	N/A	N/A	N/A	N/A	none		N/A	N/A	N/A	NA	N/A	NA	N/A	N/A	N/A	N/A
Kinder Morgan (Aka GATX)	1096	4.2 W	11400 NW St Helens	Mike Romero	PH Agr for RI/SCM (6/00)	RI	06/30/10	Bank Erosion	Ongoing	To be determined	1st qtr 2011	Physical evalution of bank, sampling if possible 4th quarter 2010	to be determined		Walting on SCE to be complete									

. (ned or s		urces of o	contamination to the					Source Cont	rol Evalu	ation (SCE)				Source	Control	Decisions	(SCDs) an	d Status of	Source Con	trol M	easures	(SCMs)
Site name	ECSI#	River mile	Address	DEQ PM	Type of agreement directing source control	Project status	Date last modified (m-d-y)	SCE Pathway	Status of SCE	Major SCE tasks to be completed	Schedule for completing SCE	Basis for determination is nee	ded Pathway	Site priority	Status of EPA review of SCE decision	Source control alternatives evaluation and schedule (m-y)	Selected SCMs	Status of EPA review of SCM selection decision	SCM activities completed to date (m-y)	Mass or volume of contaminants controlled		Date SCM completed (m-y)	Status of EPA review of completed SCM	Operaton and maintenance requirements
inder Morgan (Aka GATX)	1095	42W	11400 NW St Helens	Mike Romero	PH Agr for RUSCM (8/00)	Ri	06/30/10	Groundwater	Ongoing	RP will conduct IRAM effectiveness evaluation and FFS for barrier wall installation	1st qtr 2011	LNAPL seeps on shoreline and dissolved petroleum likely discharging to river	p High	p High	Waiting on SCE to be complete		Interim LNAPL removal and groundwater pump and treat system in operation, FFS for barrier wall is in development phase							
inder Morgan (Aka GATX)	1096	42W	11400 NW St Helens	Mike Romero	PH Agr for RUSCM (6/00)	RI	05/30/10	Stormweter	Ongoing	Stormwater SCE received, DEQ review and approval need.	3rd Qtr 2010	to be determined	to be determined		Waiting on SCE to be complete									
inder Morgan (Aka GATX)	1096	4.2 W	11400 NW SI Helens	Mike Romero	PH Agr for RESCM (5/00)	RI	06/30/10	Overwater Activities	N/A	N/A	N/A	N/A	none		N/A	N/A:	N/A	N/A	N/A	NA	N/A	N/A	NA	N/A
ander Morgan (Aka GATX)	1096	4.2 W	11400 NW SI Helens	Mike Romero	PH Agr for RI/SCM (6/00)	Ri	06/30/10	NPDES Permit for groundwater treatment discharge	Ongoing	GW treatment system & oil/water separator on NPDES - Evaluate existing data set	3rd qtr 2010	Wating on SCE to be completed	plow		Waiting on SCE to be complete									
erminal 4 Slip 1	2356	4.3 E	11040 N Lombard	Tom Gainer	PH Agr for RVSCE	RI	08/02/10	Overland Transport/Sheet Flow	N/A	N/A	N/A	N/A	nore		N/A	N/A	N/A	NA	N/A	N/A:	N/A	N/A	N/A EPA reviewed	NA
erminal 4 Slip 1	2356	4,3 E	11040 N Lombard	Torn Gainer	PH Agr for RVSCE	RI	08/02/10	Bank Erosion	Completed	SCM necessary, coordinate with T4 Early Action	Tied to T4 Early Action schedule	Pathway is complete	Low		Tied to T4 Early Action schedule	Part of T-4 Early Action Process	Cap	Selected SCMs	Wheeler Bay SCMs 10-08	Completion report submitted 9-09	Wheeler Bay bank regraded and capped fall 2008	10-08	and commented.	periodic inspection and maintenance
erminal 4 Slip	2356	4.3 E	11040 N Lombard	Tom Gainer	PH Agr for RI/SCE	RI	08/02/10	Groundwafer	Completed	None	N/A	Preliminary determination that pathway is insignificant	pLow	p Med	Waiting on results of stormwater remedy effectiveness monitoring									
erminal 4 Slip	2356	4.3 E	11040 N Lombard	Tom Gainer	PH Agr for RI/SCE	Ri	08/02/10	Stormwater	Completed	None	N/A	Complete	p Med		Waiting on results of stormwater remedy effectiveness monitoring				Stormwater BMPs and line cleanout implented - effectivness monitoring ongoing					
erminal 4 Slip	2356	43E	11040 N Lombard	Tom Gainer	PH Agr for RVSCE	RI	08/02/10	Overwater Activities	N/A	NA	N/A	No known current sources (spills reported to OERS)	none		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
erminal 4 Slip	2356	4.3 E	11040 N Lombard	Tom Gainer	PH Agr for RVSCE	RI	08/02/10	Other	N/A	N/A	N/A	N/A	none		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Linnton Plywood	2373	4.0 W	10504 NW St Helens	Matt McClincy	PH Letter Agr for XPA (3/01)	NFA	03/13/06	Overland Transport/Sheet Flow	Completed			SCM addressed this potentially complete pathway	Low		EPA reviewed and commented		Independent removal of two small upland source areas and offsite disposal in 2002	Received review 8/29/03					Received review 8/29/03	
Linnton Plywood	2373	4.5 W	10504 NW St Helens	Matt McClincy	PH Letter Agr for XPA (3/01)	NFA	03/13/06	Bank Erosion	Completed			Insignificant pathway, no actions recommended	Low		EPA reviewed and commented		No SCM needed	Received review 8/29/03					Received review 8/29/03	
Linaton Plywood	2373	4.6 W	10504 NW St Helens	Matt McClincy	PH Letter Agr for XPA (3/01)	NFA	03/13/06	Groundwater	Completed			Insignificant pathway; no actions recommended	Low	Low	EPA reviewed and commented		No SCM needed	Received review 8/29/03					Received review 8/29/03	
Linnton Plywood	2373	4.6 W	10504 NW St Helens	Matt McClincy	PH Letter Agr for XPA (3/01)	NFA	03/13/06	Stormwater	Completed			Insignificant pathway, no actions recommended	Low		EPA reviewed and commented		Ongoing Stormwater BMPs and monitoring	Received review 8/29/03					Received review 8/29/03	
Linnton Plywood	2373	4.6 W	10504 NW St Helens	Matt McClincy	PH Letter Agr for XPA (3/01)	NFA	03/13/06	Overwater Activities	Completed			Insignificant pathway, no actions recommended	Low		EPA reviewed and commented		No SCM needed	Received review 8/29/03	Tra library				Received review 8/29/03	
Linaton Plywood	2373	4.5 W	10504 NW St Helens	Matt McClincy	PH Letter Agr for XPA (3/01)	NFA	03/13/06	Other	N/A	NA	N/A	N/A	none		N/A		N/A						N/A	
Terminal 4 Sfe 3	272	4.6 E	10400 Lombard	Tom Gainer	Judgment for RD/RA (4/04)	RD/RA	08/02/10	Overland Transport/Sheet Flow	N/A	N/A - see Bank Erosion and Stormwater pathways	N/A	N/A	ncne		N/A	N/A	N/A	N/A	N/A	N/A	N/A Executive and careins	N/A	N/A	N/A
Ferminal 4 Sli	P 272	4.6 E	10400 Lombard	Tom Gainer	Judgment for RD/RA (4/04)	RD/RA	08/02/10	Bank Erosion	Completed			Pencil pitch observed and PAHs detected in ther bank soils above PECs	Medium		Spring 2009		Excavation and capping	Spring 2009			Excavation and capping at 1 of 3 areas (fall 2009); remaining 2 area to be implemented with Phase II Early Action	1 of 3 area completed		
Terminal 4 Si	p 272	4.6 E	10400 Lombard	Tom Gainer	Judgment for RD/RA (4/04)	RDIRA	08/02/10	Groundwater	Completed			Complete pathway - remedy recommended and implemented	Medium	Medium	EPA reviewed and commented, 2/2003		Bank excavation and backfill remedial action, NAPL recovery, monitoring	EPA reviewed and commented, 2/2003		2,700 cubic yards or contaminated soil removed; 30.2 gallons NAPL recovered to date	NAPL recovery and monitoring ongoing			
Terminal 4 Si	p 272	4.6 E	10400 Lombard	Tom Gainer	Judgment for RD/RA (4/04)	RD/RA	08/02/10	Stormwater	Ongoing	Stormwater sampling ongoing	4th Quarter 2011	Complete pathway; BMPs in place	p Med		Waiting on SCE to be completed									
Terminal 4 St	272	4.6 E	10400 Lombard	Tom Gainer	Judgment for RD/RA (4/04)	RD/RA	08/02/10	Overwater Activities	N/A	N/A - Historic releases to be addressed by the in-water T4 Early Action	N/A	N/A	none		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Terminal 4 St	ip 272	4.8 E	10400 Lombard	Tom Gainer	Judgment for RD/RA (4/04)	RDIRA	08/02/10	Other	N/A	N/A	N/A	N/A	none		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Johns Tank Farm	2017	4.5 E	6908 N Roberts	Jim Anderson	Pre-PH VCP Letter Ag	NFA	03/07/06	Overland Transport/Sheet Flow	NA	N/A	N/A	N/A	nane	FR	N/A	N/A	NA	N/A	N/A	NA	NA	N/A	N/A	N/A

			suspected s	ources of	contamination to t	he river t status				Source Con	trol Eval	uation (SCE))			Source	Control	Decisions	(SCDe) as	ad Status a	f Course Co	ntual M		(COM-)
			auon			Status						Basis for determinati		e control	1	Source	Control	Decisions	(SCDS) at	iu status o	f Source Co	ntrol IV	easures	(SCMs)
Site name	ECSI#	River mile	Address	DEQ PM	Type of agreement directing source control	Project status	Date last modified (m-d-y)	SCE Pathway	Status of SCE	Major SCE tasks to be completed	Schedule for completing SCE		Pathway priority level		Status of EPA review of SCE	Source control alternatives evaluation and schedule (m-y)	Selected SCMs	Status of EPA review of SCM selection decision	SCM activities completed to date (m-y)	Mass or volume of contaminants controlled	Additional Proposed SCM activities to be done and schedule (m- y)	Date SCM completed (m-y)	Status of EPA review of completed SCM	Operaton and maintenance requirements
UPRR SI Johns Tank Farm	2017	4.6 E	6908 N Roberts	Jim Anderson	Pre-PH VCP Letter Age	NFA	03/07/06	Bank Erosion	N/A	N/A	N/A	N/A	none	740	NA	NA	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
UPRR St Johns Tank Farm	2017	4.6 E	6908 N Roberts	Jim Anderson	Pre-PH VCP Letter Age	NFA	03/07/06	Groundwater	Completed			Insignificant pathway, no actions recommended		Low	SCE submitted to EPA April 2004, no comments received		No SCM needed							
UPRR SI Johns Tank Farm	2017	4.6 E	6908 N Roberts	Jim Anderson	Pre-PH VCP Letter Age	NFA	03/07/06	Stormwater	Completed			Insignificant pathway, no actions recommended	Low		SCE submitted to EPA April 2004, no comments received		No SCM needed							
UPRR St Johns Tank Farm	2017	4.5 E	6908 N Roberts	Jim Anderson	Pre-PH VCP Letter Agr	NFA	03/07/06	Overwater Activities	N/A	NA	N/A	N/A	none	180	N/A	N/A	N/A	N/A	N/A	N/A	4/4			Sing Sing
UPRR St Johns Tank	2017	4.5 E	6908 N Roberts	Jim Anderson	Pre-PH VCP Letter Agr	NFA	03/07/06	Other	N/A	N/A	N/A	N/A	none		NA	N/A	N/A				N/A	N/A	N/A	N/A
Farm IP Terminal 2T (ARCO)	1528	4.8W	9930 NW St Helens	Torn Gainer	PH Agr for RI/SCM (6/00)	RI	08/02/10	Overland Transport/Sheet Flow	N/A	N/A	N/A	N/A	none		N/A	N/A	N/A	N/A	N/A	N/A	N/A N/A	N/A N/A	N/A N/A	N/A N/A
P Terminal 2T (ARCO)	1528	4.8W	9930 NW St Helens	Tom Gainer	PH Agr for RVSCM (6/00)	RI	08/02/10	Bank Erosion	N/A	No Bank -concrete sea wall	N/A	NA	none		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
P Terminal 2T (ARCO)	1528	4,8W	9930 NW St Helens	Tom Gainer	PH Agr for RI/SCM (8/00)	RI	08/02/10	Groundwater	Completed			Free product & dissolved phase potentially reaching ther	High	High	EPA reviewed and commented 2007	alternatives evaluation completed 3//2007 for on site GW	New sheetpile barrier wall with hydraulic control and GW pump &	EPA reviewed 3/2007	Hydraulic Control system installed 1/2005, new sheetpile seawail	700 linear feet of plume controlled at riverbank		11/08		Recontamination evaluation due 4th quar 2010
P Terminal 2T (ARCO)	1528	4.5W	9930 NW St Helens	Tom Gainer	PH Agr for RVSCM (6/00)	RI	08/02/10	Stormwater	Ongoing	Sampling stormwater system	4th Quarter 2010	Waiting on SCE to be completed	to be determined		Waiting on SCE to be completed.		treat system		11/2007					
P Terminal 2T (ARCO)	1528	4.8W	9930 NW SI Helens	Torn Gainer	PH Agr for RVSCM (6/00)	RI	08/02/10	Overwater Activities	N/A	N/A	N/A	No known current sources (spills reported to OERS)	none		N/A	N/A	N/A	N/A	N/A.	N/A	N/A	N/A	N/A	N/A
P Terminal 2T (ARCO)	1528	4.8W	9930 NW St Helens	Tom Gainer	PH Agr for RVSCM (8/00)	Ri	08/02/10	Near shore sediment	N/A	N/A	N/A	NIA	none		N/A	afternatives evaluation for near-shore sediment completed 3/07	Revetment and near-shore sediment removal and off- ste discosal	EPA reviewed 3/07	Sediment removal complete 11/05	16,300 CY sediment	Final grading and planting summer 2009	11/08	TBD	Recontamination evaluation
Port of ordand Auto orage Area (ASA)	172	5.0 E	10400 Lombard	Tom Gainer	Pre-PH DEQ/Port IGA (11/00)	NFA	03/06/06	Overland Transport/Sheet Flow	N/A	N/A	N/A	N/A	none		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Port of ortland Auto orage Area (ASA) Port of	172	5.0 E	10400 Lombard	Tom Gainer	Pre-PH DEQ/Port IGA (11/00)	NFA	03/06/06	Bank Erosion	Completed			Insignificant pathway, no actions recommended	Low		EPA reviewed and commented 6/04		No SCM needed							
Port of ortland Auto orage Area (ASA) Port of	172	50E	10400 Lombard	Tom Gainer	Pre-PH DEQ/Port IGA (11/00)	NFA	03/06/06	Groundwater	Completed			Insignificant pathway, no actions recommended	Low		EPA reviewed and commented 6/04		No SCM needed							19 - 11-60
orage Area (ASA)	172	5.0 E	10400 Lombard	Tom Gainer	Pre-PH DEQ/Port IGA (11/00)	NFA	03/06/08	Stormwater	Completed			Insignificant pathway, no actions recommended	Low	Low	EPA reviewed and commented 5/04		No SCM needed							
Port of rtland Auto orage Area (ASA)	172	50E	10400 Lombard	Tom Gainer	Pre-PH DEQ/Port IGA (11/00)	NFA	03/06/06	Overwater Activities	N/A	N/A	NA	No known current sources (spills reported to OERS)	none		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Port of riland Auto orage Area (ASA)	172	5.0 E	10400 Lombard	Torn Gainer	Pre-PH DEQ/Port IGA (11/00)	NFA	03/06/06	Other	N/A	N/A	N/A	N/A	none		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
oon Mobil	137	5.1 W	9420 NW St Helens	Tom Gainer	VCP Agr for Remedial Action (5/02)	RD/RA	08/02/10	Overland Transport/Sheet Flow	N/A	N/A	N/A	N/A	none		N/A	N/A	N/A	NA	N/A	N/A	N/A	N/A	N/A	NA
ocon Mobili	137	5.1 W	9420 NW St Helens	Tom Gainer	VCP Agr for Remedial Action (5/02)	RD/RA	08/02/10	Bank Erosion	N/A	N/A	N/A	N/A	none		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
oon Mobil	137	5.1 W	9420 NW St Helens	Tom Gainer	VCP Agr for Remedial Action (5/02)	RDRA	08/02/10	Groundwater	Completed			Groundwater is a complete pathway	High	High	DEQ issued a ROO in 1997 requiring groundwater treatment	DEQ issued a ROD in 1997 requiring groundwater treatment	Additional GW hydraulic control planned for "hydraulic gap" area in 4th	Possibility only if remedy is shown not to be protective and alternative remedial action is proposed			Additional SCMs in hydrualic gap at downstream end of site planned for 4th quarter 2010			Sylem inspection, opertion, and effectiveness monitorioning
onn Mobil	137	5.1 W	9420 NW St Helens	Tom Gainer	VCP Agr for Remedial Action (5/02)	RD/RA	08/02/10	Stormwater	Pending EPA Review	Current facility owner NuStar will conduct SCE for bulk plant, ExemMobil will conduct	2nd Quarter 2011	Waiting on SCE to be completed	to be determined				quarter 2010							

	Confirme	ed or si	uspected so	urces of o	contamination to th	e river				Source Cont	rol Evalu	ation (SCE)				Source	Control	Decisions	(SCDs) an	d Status o	f Source Cor	ntrol M	easures	(SCMs)
	Site i	inform	ation		Project	status				Journe Cont	Tot Evalu	Basis for determination	that source	control				A No. COLO. CO. CO.	To a second consequent	Course someone and the second			Status of EPA	Operaton and
Site name		River mile	Address	DEQ PM	Type of agreement directing source control	Project status	Date last modified (m-d-y)	SCE Pathway	Status of SCE	Major SCE tasks to be completed	Schedule for completing SCE	is nee Pathway determination		Site	Status of EPA review of SCE decision	Source control alternatives evaluation and schedule (m-y)	Selected SCMs	Status of EPA review of SCM selection decision	SCM activities completed to date (m-y)	Mass or volume of contaminants controlled	SCM activities to be done and schedule (m- y)	Date SCM completed (m-y)	review of completed SCM	maintenance requirements
Exen Mobil	137	5.1 W	9420 NW SI Helens	Tom Gainer	VCP Agr for Remedial Action (5/02)	RDIRA	08/02/10	Overwater Activities	NIA	NA	N/A	No known current sources (spills reported to OERS)	none		NA	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Exxon Mobil	137	5,1 W	9420 NW SI Helens	Tom Gainer	VCP Agr for Remedial Action (5/02)	RD/RA	08/02/10	Other	Not Started	N/A	N/A	NA	to be determined				March 1				1000			
Olympic Pipeline Portland facility within ExenMobil	3342	5.2W	9420 NW St Helens	Tem Galher	ICP	XPA	02/19/09	Overland Transport/Sheet Flow	N/A	N/A	N/A	N/A	none		N/A	NA	N/A	N/A	N/A	N/A	N/A	N/A	N/A	NA
Olympic Pipeline Portland acility within ExonMobil	3342	5.2W	9420 NW St Helens	Tom Gainer	icp	хра	08/02/10	Bank Erosion	N/A	N/A	NIA	NA	none		NA	N/A	N/A	N/A	NIA	N/A	N/A	NIA	N/A	NIA
Olympic Pipeline Portland facility within ExagnMobil	3342	5.2W	9420 NW St Helens	Tom. Gainer	ICP	XPA	08/02/10	Groundwater	Completed			Insignificant pathway; no actions recommended	pLow	plow	Waiting on SCE completion		Conducted soll removal following petroleum spill in mid 1990s							
Olympic Pipeline Portland Facility within ExenMobil	3342	5.2W	9420 NW St Helens	Tom Gainer	ICP	ХРА	08/02/10	Stormwaler	Ongoing	Dependent upon groundwafer conditions	4th Quarier 2011	Waiting on SCE to be completed	to be determined	la Lil	Waiting on SCE completion						-			
Olympic Pipeline Portland actity within ExonMobil	3342	5.2W	9420 NW St Helens	Tom Gainer	ICP	ХРА	08/02/10	Overwater Activities	N/A	NA	N/A	N/A	ngne		N/A	NA	NIA	NA	N/A	N/A	N/A	N/A	N/A	NA
Olympic Pipeline Portland actify within ExonMobil	3342	5.2W	9420 NW St Helens	Tom Gainer	Ю	XPA	08/02/10	Other	NA	NA	N/A	N/A	nore		N/A.	NA	N/A	NA	NA	N/A	N/A	N/A	N/A	NA
Shore erminals (aka NuStar and Valero was ECSI #1989)	5130	5.4W	9400 NW St Helens Rd	Jim Orr	VCP Agreement for Stormwater Assessment & Source Control	SCE	07/29/10	Overland Transport/Sheet Flow	Not Started	Source Control Evaluation Assessment SOW under review implimentation fall 2010	2nd Quarter 2011	Pathway derermination	to be determined		Waiting on SCE completion March 2011									
Shore erminals (aka NuStar and Valero was ECSI #1989)		5.4W	9400 NW St Helens Rd	Jim Orr	VCP Agreement for Stammater Assessment & Source Control	SCE	07/29/10	Bank Erosion	Not Started	Source Control Evaluation Assessment SOW under review	2nd Quarter 2011	Pathway is complete	p Med		Waiting on SCE completion March 2011									
Shore erminals (aka NuStar and Valero was ECSI #1989)		5.4W	9400 NW St Helens Rd	Jim Orr	VCP Agreement for Stormwater Assessment & Source Control	SCE	07/29/10	Groundwater	Not Started	Source Control Evaluation Assessment SOW under review	2nd Quarter 2011	Pathway is complete	p Med	p Med	Waiting on SCE completion March 2011									
Shore erminals (aka NuStar and Valero was ECSI #1989)		5.4W	9400 NW St Helens Rd	Jim Orr	VCP Agreement for Stormwater Assessment & Source Control	SCE	07/29/10	Stormwaler	Not Started	Source Control Evaluation Assessment SOW under review implimentation fail 2010	2nd Quarter 2011	to be determined	to be determined		Waiting on SCE completion March 2011									
Shore erminals (aki NuStar and Valero was ECSI #1989)	5130	5.4W	9400 NW St Helens Rd	Jim Orr	VCP Agreement for Stormwater Assessment & Source Control	SCE	07/29/10	Overwater Activities	Not Started	Source Control Evaluation Assessment SOW under review	2nd Quarter 2011	to be determined	to be determined		Waiting on SCE completion March 2011									
Shore erminals (ak NuStar and Valero was	5130	5.4W	9400 NW St Helens Rd	Jim Orr	VCP Agreement for Stormwater Assessment & Source Control	SCE	07/29/10	Loading Rack investigation	Ongoing	Characterization of releases from loading rack	to be determined	to be determined	to be determined		Waiting on SCE completion									
Brix Maritime (aka Foss)		5.5 W	9030 NW St Helens	Jim Orr	PH Agr for RI/SCM (5/02)	RVSCE	07/29/10	Overland Transport/Sheet Flow	N/A	N/A	NA	N/A	none		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Brix Maritime (aka Foss)	2364	5.5 W	9030 NW St Helens	Jim Orr	PH Agr for RVSCM (5/02)	RVSCE	07/29/10	Bank Erosion	Ongoing	Evaluated as part of SCE	4th Quarter 2011	Not believed to be a complete pathway	p.Low		Waiting on SCE to be completed									
Brix Maritime (aka Foss)		5.5 W	9030 NW St Helens	Jim Orr	PH Agr for RVSCM (5/02)	RVSCE	07/29/10	Groundwater	Ongoing	SCE Report Under Development	4th Quarter 2011	Pathway is complete	pMed	p Med	Waiting on SCE to be completed									
Brix Maritime (aka Foss)		5.5 W	9030 NW St Helens	Jim Orr	PH Agr for RVSCM (5/02)	RIGCE	07/29/10	Stormwater	SCE Report is being Produced. All data collected	Catch basin sediment sampling/screening for site COI plus PCBs and phthatates, and follow-up storm water sampling per JSCS.	4th Quarter 2011	to be determined	to be determined	5	Waiting on SCE to be completed									
Brix Maritime (aka Foss)		5.5 W	9030 NW St Helens	Jim Orr	PH Agr for RI/SCM (5/02)	RVSCE	07/29/10	Overwater Activities	N/A	N/A	N/A	No known current sources (spills will be reported to OERS)	none		Waiting on SCE to be completed									
Brix Maritime (aka Foss)		5.5 W	9030 NW St Helens	Jim Orr	PH Agr for RVSCM (5/02)	RISCE	07/29/10	Other	N/A	N/A	N/A	N/A	none		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

			suspected s	sources of	contamination to the	he river t status				Source Cor	ntrol Evalu	ation (SCE)				Source	e Control	Decisions	(SCDs) ar	nd Status o	f Source Co	ntrol M	leasures	(SCMe)
Site name	ECSI#	River mile	Address	DEQ PM	Type of agreement directing source control	Project status	Date last modified (m-d-y)	SCE Pathway	Status of SCE	Major SCE tasks to be completed	Schedule for completing SCE	Basis for determination is ne	on that sourceded Pathway priority	Site	Status of EPA review of SCE decision	Source control alternatives evaluation and schedule (m-y)	n Selected SCMs	Status of EPA	SCM activities completed to date (m-y)	Mass or volume of contaminants controlled	Additonal Proposed SCM activities to be done and schedule (m- y)	Date SCM completed (m-y)	Status of EPA review of completed SCM	Operaton and maintenance requirements
Mar Com Marine (N Parcel)	4797	5.6 E	8790 N Bradford	Mike Romero	PH Agr for RVSCM (11/01)	NFA	03/06/09	Overland Transport/Sheet Flow	Completed			overland soil transport suspected migration pathway	Low	level	EPA reviewed and commented 2004	alternatives evaluation completed in 2004	removal of 278 cubic yards of sandblast grit and soit; DEQ issues SCD in	EPA reviewed and approved 2004	2007	278 CY soil	Port of Portland conderned property, Port conducted soil removal as prescribed in ROD	5/07	EPA commented 5/08	None
Mar Com Marine (N Parcel)	4797	5.6 E	8790 N Bradford	Mike Romero	PH Agr for RVSCM (11/01)	NFA	03/06/09	Bank Erosion	Not Started			Deferred investigation of beach to Mar Com South Parcel	p Med				Deferred investigation of beach to Mar Com South Parcel				5/07			
Mar Corn Marine (N Parcel)	4797	55E	8790 N Bradford	Mike Romero	PH Agr for RVSCM (11/01)	NFA	03/06/09	Groundwater	Completed			Insignificant pathway, no actions recommended	Low	p Med	EPA reviewed and commented 2004		NA							
Mar Com Marine (N Parcel)	4797	5.6 E	8790 N Bradford	Mike Romero	PH Agr for RVSCM (11/01)	NFA	03/06/09	Stormwater	Completed			Insignificant pathway; no actions recommended	Low		EPA reviewed and commented 2004		N/A							
Mar Com Marine (N Parcel)	4797	5.8 E	8790 N Bradford	Mike Romero	PH Agr for RI/SCM (11/01)	NFA	03/06/09	Overwater Activities	N/A	N/A	N/A	N/A	none		N/A	NA	N/A	N/A	N/A	N/A	NA	N/A	N/A	N/A
Mar Com Marine (N Parcel)	4797	5.5 E	8790 N Bradford	Mike Romero	PH Agr for RI/SCM (11/01)	NFA	03/06/09	Other	NA		N/A	N/A	none		N/A	N/A	N/A	N/A	NA	N/A	N/A	N/A	N/A	N/A
Marine inance, AKA Advanced American	2352	5.8 W	8444 NW St Helens	Mark Pugh	PPA	NFA	06/15/08	Overland Transport/Sheet Flow	Completed			contaminated over screening criteria in soil potentially susceptible to runoff	Low		SCE submitted to EPA 9/30/04. No comments received.	alternatives evaluation completed 2004	Dig and haul soil contamination; capping with clean fill and/or building	SCM submitted to EPA 9/2004, no comments received	Soil removed 08/05; selected site areas capped with building and/or clean fit	1,150 cubic yards of soil removed (estimated); report pending		11/05	SCD submitted to EPA July 18, 2007.	Institutional control for cap and building will be required.
Marine mance, AKA Advanced American	2352	5.8 W	8444 NW St Helens	Mark Pugh	PPA	NFA	08/15/08	Bank Erosion	Completed			Insignificant pathway, no actions recommended	Low		SCE submitted to EPA 9/30/04. No comments received.	alternatives evaluation completed 2004	No SCM needed						SCD submitted to EPA July 18, 2007.	N/A
Marine inance, AKA Advanced American	2352	58W	8444 NW St Helens	Mark Pugh	PPA	NFA	06/16/08	Groundwater	Completed			Insignificant pathway, no actions recommended	Low		SCE submitted to EPA 9/30/04. No comments received.	alternatives evaluation completed 2004	No SCM needed.						"SCO submitted to EPA July 18, 2007.	N/A
Marine inance, AKA Advanced American	2352	5.8 W	8444 NW St Helens	Mark Pugh	PPA	NFA	06/16/08	Stormwater	completed			Insignificant pathway, no actions recommended	Low	Low	N/A	N/A	N/A	N/A	NA	NA	Storm drain system was installed in May 2006; 3 storm water sampling events complete. 1 more pending.		"SCD submitted to EPA July 18, 2007.	NA
Marine nance, AKA Advanced American	2352	5.8 W	8444 NW St Helens	Mark Pugh	PPA	NFA	06/16/08	Overwater Activities	N/A	NA	N/A	No known current sources (spills reported to OERS)	лопе		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	NIA	N/A
Marine nance, AKA Advanced American	2352	5.8 W	8444 NW St Helens	Mark Pugh	PPA	NFA	06/16/08	Other	N/A	NA	N/A	N/A	none		N/A	N/A	N/A	N/A	N/A	N/A	NA	N/A	N/A	N/A
fer Corn (S Parcel)	2350	58E	8790 N Bradford	Mke Romero	PH Agr	RI	08/30/10	Overland Transport/Sheet Flow	Ongoing	Reviewing revised SCE	Pending review	Complete	p High		To be determined				1/2/11					
far Com (S Parcel)	2350	5.8 E	8790 N Bradford	Mke Romero	PH Agr	Ri	06/30/10	Bank Erosion	Ongoing	Reviewing revised SCE	Pending review	TBO	p Med		To be determined									
far Corn (S Parcel)	2350	5.8 E	8790 N Burgard	Mike Romero	PHAgr	Ri	06/30/10	Groundwater	Ongoing	Reviewing revised SCE	Pending review	TBO	p Med	p High	To be determined							7.		
tar Com (S Parcel)	2350	5.8 E	8790 N Bradford	Mike Romero	PHAgr	RI	06/30/10	Stormwater	Origoing	Reviewing revised SCE	Pending review	ТВО	to be determined		To be determined								400	
far Com (S Parcel)	2350	5.8 E	8790 N Bradford	Mike Romero	PH Agr	Ri	06/30/10	Overwater Activities	N/A	No current overwater activities, only historic	N/A:	N/A	N/A		N/A		Floating dry dock sold in 2004, and removed from site							
lar Com (8 Parcel)	2350	5.8 E	8790 N Bradford	Mike Romero	PH Agr	RI	06/30/10	Other	N/A	N/A	N/A	N/A	none		N/A	N/A	N/A	NA	N/A	N/A	N/A	N/A	NIA	N/A
S Water Lab	2452	6 0E	6543 N Burlington	Mark Pugh	IGA	NFA	05/25/10	Overland Transport/Sheet Flow	Completed	none	Complete	insignificant pathway, no actions recommended	Low		EPA has reviewed and commented on SCD	no alternatives evaluation needed			-10-10		no alternatives evaluation needed	no alternatives evaluation needed	no alternatives evaluation needed	no alternatives evaluation needed
S Water Lab	2452	6.0E	6543 N Burlington	Mark Pugh	IGA	NFA	05/25/10	Bank Erosion	Completed	none	Complete	Insignificant pathway, no actions recommended	Low		EPA has reviewed and commented on SCD	no alternatives evaluation needed	10000	SOUTH TOWN		100		1341	10.	

.(suspected s	ources of	contamination to the					Source Cont	rol Evalu	ation (SCE)				Source	Control	Decisions	(SCDs) an	d Status o	f Source Cor	ntrol M	easures	(SCMs)
Site name		River mile	Address	DEQ PM	Type of agreement directing source control	Project status	Date last modified (m-d-y)	SCE Pathway	Status of SCE	Major SCE tasks to be completed	Schedule for completing SCE	Basis for determination is nee Pathway determination	ded Pathway	Site priority level	Status of EPA review of SCE decision	Source control alternatives evaluation and schedule (m-y)	Selected SCMs	Status of EPA review of SCM selection decision	SCM activities completed to date (m-y)	Mass or volume of contaminants controlled	Additional Proposed SCM activities to be done and schedule (m- y)	Date SCM completed (m-y)	Status of EPA review of completed SCM	Operaton and maintenance requirements
BES Water Lab	2452	6.0E	6543 N Burlington	Mark Pugh	IGA	NFA	05/25/10	Groundwater	Completed	none	Complete	Insignificant pathway, no actions recommended	Low	Low	EPA has reviewed and commented on SCD	no alternatives evaluation needed								
BES Water Lab	2452	6.0E	6543 N Burlington	Mark Pugh	IGA	NEA	05/25/10	Stormwater	Completed	none	Complete	Insignificant pathway, no actions recommended	Low		EPA has reviewed and commented on SCD	no alternatives evaluation needed			Maria Control			ist		
BES Water Lat	2452	6.0E	6543 N Burlington	Mark Pugh	KGA	NFA	05/25/10	Overwater Activities	Completed	N/A	N/A	No known current sources (spills will be reported to OERS)	Low		EPA has reviewed and commented on SCD	no alternatives evaluation needed	RE-TI		MEST					WEST SE
BES Water Lab	2452	6.0E	6543 N Burlington	Mark Pugh	KGA .	NFA	05/25/10	Other	Completed	NA	N/A	No known current sources (spills will be reported to OERS)	Low		EPA has reviewed and commented on SCD	no alternatives evaluation needed							311	E-VAT
US Moorings	1641	6.2W	8010 NW St. Helens Rd.	Mark Ader EPA	Federal RCRA Order	FS	08/02/10	Overland Transport/Sheet Flow	Completed						EPA preparing proposed Plan October 2010									
US Moorings	1641	6.2W	8010 NW St. Helens Rd.	Mark Ader EPA	Federal RCRA Order	FS	08/02/10	Bank Erosion	Completed						EPA preparing proposed Plan October 2010					1				
US Moorings	1641	6.2W	8010 NW St. Helens Rd.	Mark Ader EPA	Federal RCRA Order	FS	08/02/10	Groundwater	Completed						EPA preparing proposed Plan October 2010									
US Moorings	1641	6.2W	8010 NW SL Helens Rd.	Mark Ader EPA	Federal RCRA Order	FS	08/02/10	Stormwater	Completed						EPA preparing proposed Plan October 2010									
US Moorings	1641	6.2W	8010 NW St. Helens Rd.	Mark Ader EPA	Federal RCRA Order	FS	08/02/10	Overwater Activities	Completed				1		EPA preparing proposed Plan October 2010 EPA preparing									
US Moorings	1641	6.2W	8010 NW St. Helens Rd.	Mark Ader EPA	Federal RCRA Order	FS	08/02/10	Other	Completed						proposed Plan October 2010		Work plan to	-						
Crawford Street Corp	2383	6.3 E	84248 N Crawford	Shawn Rapp	PH Letter Agr for XPA (11/99)	XPA	07/01/10	Overland Transport/Sheet Flow	Ongoing	See Stormwater Pathway	2nd Quarter 2011	Waiting on SCE to be completed	to be determined		Waiting on SCE completion		sample erodible surface soils approved; results pending							
Crawford Street Corp	2363	63E	54248 N Crawford	Shawn Rapp	PH Letter Agr for XPA (11/99)	XFA	07/01/10	Bank Erosion	Ongoing	Bank characterization underway	2nd Quarter 2011	Wating on SCE to be completed	to be determined		Weiling on SCE completion		RP removed black sand from beach and bank in 10/01. Residual contamination exists on beach deferred to in- water RI. Bank was replaced with clean fill.							
Crawford Street Corp	2363	63E	84248 N Crawford	Shawn Rapp	PH Letter Agr for XPA (11/99)	XPA	67/01/10	Groundwater	Ongoing	None	2nd Quarter 2011	insignificant pathway, no actions recommended	plow	pLow	Waiting on SCE completion									
Crawford Street Corp	2363	6.3 E	84248 N Crawford	Shawn Rapp	PH Letter Agr for XPA (11/99)	XPA	07/01/10	Stormwater	Ongoing	Storm water sampling per JSCS	2nd Quarter 2011	Waiting on SCE to be completed	to be determined		Waiting on SCE completion		RP currently evaluating possible stormwater piping and seep agurces							
Crawford Street Corp	2363	6.3 E	84248 N Crawford	Shawn Rapp	PH Letter Agr for XPA (11/99)	XPA	07/01/10	Overwaler Activities	NA	N/A	N/A	N/A	none		N/A	NA	N/A	NA	N/A	N/A	N/A	N/A	N/A	N/A
Crawford Street Corp		6.3 E	84248 N Crawford	Shawn Rapp	PH Letter Agr for XPA (11/99)	XPA	07/01/10	Other	N/A	N/A	N/A	N/A	none		N/A	NA	N/A	N/A	NA	N/A	N/A	NIA	N/A	N/A
NW Natural "Gasco" Site		6.4 W	TONG ARM ST		Pre-PH VCP Agr for RVFS (8/94) amender 7/06		10/30/10	Overland Transport/Sheet Flow	Completed	None	4th Quarter 2010	Pathway potentially complete	ptow		N/A	Potential runoff in eastern corner of site w be controlled by future bank remedial work which will be EPA lead	N/A:	NIA	N/A	N/A	NA	NA	N/A	N/A
NW Natural "Gasco" Sti		6.4W	7900 NW S Helens	Dana Bayuk	Pre-PH VCP Agr for RIFS (8/94) amende 7/06	d RI	07/30/10	Bank Erosion	Completed	N/A, NW Natural moving forward with source control	NIA, NW Natura submitted SCM evaluation (FFS	Pattrway is complete	Hgh		hila	SCM Evaluation (FFS) received 11/07, DEQ review complete (3/08)	removal, and	EPA comments received 2/08			NW Natural, EPA, and DEQ agried therbank remediation will take place concurrently with the construction phase the NW Natural & Siltronic in-water sediment action, both the overseen by EPA. ACC for in-water work finalized 9/09.	of		

			r suspected :	sources of	f contamination to	the river		-		Source Cor	trol Evalu	ration (SCE	`			Source	Control	Daalalaua	/00D-1	1011				WENT DOWN
	T	T	I	T		- status	Leaven					Basis for determinat		ce control	1	Source	Control	Decisions	(SCDS) ar	nd Status o	f Source Cor	ntrol M	easures	(SCMs)
Site name	ECSI	River mile	Address	DEQ PM	Type of agreement directing source control	Project status	Date last modified (m-d-y)	SCE Pathway	Status of SCE	Major SCE tasks to be completed	Schedule for completing SCE	is n	Pathway priority level		Status of EPA review of SCE	Source control alternatives evaluation and schedule (m-y)	Selected SCMs	Status of EPA review of SCM selection decision	SCM activities completed to date (m-y)	Mass or volume of contaminants controlled	Additional Proposed SCM activities to be done and schedule (m- y)	Date SCM completed (m-y)	Status of EPA review of completed SCM	Operaton and maintenance requirements
NW Natural "Gasco" Sas		6.4 W	7900 NW St. Helens	Dana Bayuk	Pre-PH VCP Agr for RVFS (8/94) amended 7/06	RI	G7/30/10	Groundwater	Completed	N/A, NW Natural submitted SCM Evaluation (FFS)	N/A: NW Natural submitted SCM Evaluation	Pathway is complete	High	High	N/A	SCM Evaluation (FFS) submitted 11/07, DEQ review complete 3/08	Vertical barrier in most contaminated shoreline area (Segment 1), hydraulic containment along site shoreline (segments 1 and 2), and DNAPL removal beneath former effluent ponds.	EPA comments received 2/08	Preliminary design received (8/05). DEQ review complete (8/05) interim Design received (1/109). DEQ review complete (3/10). DEQ conditionally approved Segment 2 design. Due to DNAPL concerns and training of implementation DEQ deferred source control aing "Gasco" portion of Segment 1 to uplands FS.		NW Natural formally disputing DEQ Segment 1 source control decision.			
NW Natural "Gasco" Site		64W	7900 NW St Helens	Dana Bayuk	Pre-PH VCP Agr for RIFS (8/94) amended 7/06	Ri	07/30/10	Stormwater	Ongoing	Complete stormwater & catch basin sampling report for JSCS screening purposes.	4th Quarter 2010	Pathway is complete	to be determined		Waiting on SCE to be completed.									
NW Natural "Gasco" Site	84	64 W	7900 NW St Helens	Dana Bayuk	Pre-PH VCP Agr for RVFS (8/94) amended 7/06	RI	07/30/10	Overwater Activities	N/A	N/A	N/A	No known current sources (spills reported	none		N/A	N/A		N/A	N/A	N/A	N/A	NIA	N/A	
NW Natural - "Gasco" Site	84	6.4 W	7900 NW St Hetens	Dana Bayuk	Pre-PH VCP Agr for RVFS (8/94) amended 7/06	RI	07/30/10	Other - Kappens MPDES Permit	Ongoing	Complete catch basin sediment sampling report for JSCS screening purposes.	4th Quarter 2010	Waiting on SCE to be completed	to be determined		Waiting on SCE to be completed			271			16.7	No	NA	N/A
Koppers Inc	2348	6.5 W	7540 NW St. Helens Rd.	Dana Bayuk			07/30/10	Overland Transport/Sheet Flow												100000000000000000000000000000000000000		0.570		Man Hilliam
Koppers Inc	2348	6,5 W	7540 NW St. Helens Rd.	Dana Bayuk			07/30/10	Bank Erosion																
Koppers Inc	2348	6.5 W	7540 NW St. Helens Rd.	Dana Bayuk			07/30/10	Groundwater																
Koppers Inc	2348	6.5 W	7540 NW St. Helens Rd.	Dana Bayuk	Part of NW Natural "Gasco" Site; see		07/30/10	Stormwater						to be										
Koppers Inc	2348	6.5 W	7540 NW St. Helens Rd.	Dana Bayuk	ESCI#84		07/30/10	Overwater Activities						determin ed										
Koppers Inc	2348	6.5 W	7540 NW St. Helens Rd.	Dana Bayuk		Ongoing	07/30/10	Other - Koppers NPDES Permit	Ongoing	Complete catch basin sediment sampling report for JSCS screening purposes.	4th Quarter 2010	Waiting on SCE to be completed	to be determined		Waiting on SCE to be completed									
NW Natural - *Sitronic MGP Sta	183	5.6 W	7700 NW Front	Dana Bayuk	Joint NW Natural/Sitronic Order (10/00) & Amendment #1 (7/06) to Pre-PH VCP Agr for RIFS (8/94)		08/02/10	Overland Transport/Sheel Flow	NA	NA	NA	N/A	none		N/A	NA	N/A	N/A	N/A	NA	N/A	NA	N/A	N/A
NW Natural - Sitronic MGP Site	183	66W 1	7700 NW Front	Dana Bayuk	Joint NW Natural/Sitronic Order (10/00) & Amendment #1 (7/05) to Pre-PH VCP Agr for RVFS (8/94)	RI	08/02/10	Bank Erosion	Ongoing	Complete characterization of MGP waste/contamination along shoretime per NW Natural's "Siltronic MGP Site" RI work plan approved 10:07,	to be determined	Walling on SCE to be completed	to be determined		Waiting on SCE to be completed									
NW Natural - Sitronic MGP Site	183	6.8W 7	7700 NW Front	Dana Bayuk	Joint NW Natural/Sitronic Order (1000) & Amendment \$1 (7009) to Pre-PH VCP Agr for RVFS (8/94)	RI,	08/02/10	Groundwater	Siltronic portion of Segment 1 complete, Segment 3 ongoing	MGP waste and contamination being investigated along shoreline upstream of Segment 1 (e.; Segment 3) per MGP RI work plan. Review draft of Segment 3 SCE submitted 2/09.	4th Quarter 2010 (Segment 3 projected)	Pathway is complete	High	Hah		SCM Evaluation (FFS) received 11/07, including Sittronic portion of Segment 1; DEG review complete (3/05)	Hydrautic containment of Siltronic portion of Segment 1	EPA comments received 2/08	Prelimitary design received (608) DEQ widew complete (608) International received (11/00) DEQ review complete (81/00) DEQ conditionally approved NVV Natural's leterin design for two extraction wells along distriction of Segment 1.		NW Natural formally disputing DEQ Segment 1 source control decision for "Gasco" site portion of Segment 1.			
NW Natural - Sätronic MGP Säe	183	6.6 W 7	7700 NW Front	Dana Bayuk	Join NW Natural/Siltronic Order (1000) & Amendment #1 (7/06) to Pre-PH VCP Agt for RUFS (6/94)	Ri	08/02/10	Stormwater	Ongoing	Evaluate MGP wasteteordamination in shallow sols per MGP RI work plan and combine with Sitronics stormwater system data.	4th Quarter 2010	Pathway is complete	to be determined		Waiting on SCE to be completed									

	Confir	rmed c	or sus	spected sou	rces of c	ontamination to th					Source Conf	rol Evalua	ation (SCE)				Source	Control	Decisions	(SCDs) an	d Status of	Source Co	ntrol M	easures	(SCMs)
	Sit	e info	ormat	tion		Project	status						Basis for determination is nee		control	Status of EPA	Source control		Status of EPA	SCM activities	Mass or volume of	Additional Proposed SCM activities to be	Date SCM	Status of EPA review of	Operaton and maintenance
Site name	ECSI	# Rive		Address	DEQ PM	Type of agreement directing source control	Project status	Date last modified (m-d-y)	SCE Pathway	Status of SCE	Major SCE tasks to be completed	Schedule for completing SCE	Pathway determination	Pathway priority level	Site priority level	review of SCE decision		Selected SCMs	review of SCM selection decision	completed to date (m-y)	contaminants controlled	done and schedule (m- y)	completed (m-y)	completed SCM	requirements
NW Natura "Sitronio IM Site		8.5 V	w 770	0 NW Front	Dana Bayuk	Joint NW Natural/Sitronic Order (1000) & Amendment #1 (7/06) to Pre-PH VCP Agr for RIFS (8/94)	RI	08/02/10	Overwater Activities	NA	N/A	N/A	N/A	nona		NA	N/A:	NIA	N/A	N/A.	N/A	N/A	N/A	NA	NIA
NW Natura "Sitronic Mi Site	1- SP 183	661	W 770	00 NW Front	Dans Bayuk	Joint NW Natural/Siltronic Order (10/00) & Amendment #1 (7/08) to Pre-PH VCP Agr for RVFS (8/94)	RI	08/02/10	Other - Doorse Creek	Ongoing	Investigate COI contributions to Doane Creek & City's OF- 22C per Sittronic MGP Site RI work plan (Summer 2010)	TBD pending results of bank soil, stream sediment, and surface water sampling proposed in MGP RI	Pathway is complete	to be determined		Waiting on SCE to be completed									
Sitronic Co TCE Investigati	183	8.5 \	W 720	00 NW Front	Dana Bayuk	VCP Order (2/04) & Joint NW Natural/Sätronic Order (10/00)	Ri.	08/02/10	Overland Transport/Sheet Flow	N/A	N/A, subsurface releases from UST system	N/A	N/A	none		N/A	N/A	N/A	NA	N/A	N/A	N/A	N/A	N/A	NA
Siltronic Co TCE Investigati	183	6.51	W 720	00 NW Front	Dana Bayuk	VCP Order (2/04) & Joint NW Natural/Sitronic Order (10/00)	RI	08/02/10	Bank Erosion	N/A	N/A, subsurface releases from UST system	N/A	N/A	none		N/A	NA	NA	NA	N/A	N/A	N/A	N/A	N/A	N/A
Sitronic Co TCE Investigati	183	6.51	W 720	00 NW Front	Dana Bayuk	VCP Order (2/04) & Joint NW Natural/Siltronic Order (10/00)	RI	08/02/10	Groundwater	Completed	N/A, Sittronic moving forward with source control, SCM Evaluation (FFS) submitted 10/07	N/A, Siltranic submitted SCM Evaluation	Pathway is complete	NVA. Siltronic submitted SCM Evaluation			SCM Evaluation (FFS) complete (12/07), DEQ resiew complete (2/08)	Enhanced in-stu bioremediation (EIS) in source area of TCE release, hydrautic containment in coordination with NW Natural along shoreline	EPA comments communicated to Sitronic 5/08	Final EIB work plan received (1008), approved by DEQ (1208), EIB performance monitoring well network establisher (2/09), EIB injection complete (7/09)		Groundwater monitoring within and downgradier of source area (i.e., former UST system) to assess EBs performance and effectiveness is ongoing.	t .		Contingency meaures@nydraulic controlloontainment may be inplemented based on downgradent groundwater performance monitoring data and trends.
Sitronic C TCE Investigat	183	3 6.5	W 720	00 NW Front	Dana Bayuk	VCP Order (2/04) & Joint NW Natural/Satronic Order (10/00)	RI	08/02/10	Stormwater	Ongoing	Complete storm water and corch basin report per JSCS	4th Quarter 2010	Pathway is complete	to be determined	High	Waiting on SCE to be completed									
Sittronic C TCE Investigat	183	3 6.5	W 72	00 NW Front	Dana Bayuk	VCP Order (2/04) & Joint NW Natural/Sitronic Order (10/00)	FEI	08/02/10	Overwater Activities	N/A	NA.	N/A	NIA	none		:N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	NA	N/A
Sitronic C TCE Investiga	183	3 6.5	5 W 72	200 NW Front	Dana Bayuk	VCP Order (2/04) & Joint NW Natural/Satronic Order (10/00)	e Po	08/02/10	Other - Sediment contamination (Area 2) offshore of northern facility outsit (Outsit 001)	N/A	WA	NIA	NA	1		N/A		,			4:	Area 2 sediment contamination will be included in NW Natural Sistronic in-was sediment action overseen by EPA. Act for in-water work finalized 9/09.			
Wilame		66 6.8		Foot of N	Ken	PH Agr for RVSCM	RI	07/06/10	Overland Transport/Sheet Flow	Completed	None	Walting on completion of	Wating on SCE WP to be completed	plow	pLow	Waiting on SCE to be completed				Removal of contaminated so completed June		THE REAL PROPERTY.			
Villame	tia 206	88 6.8		Foot of N	Thiessen	(11/00) PH Agr for RI/SCM (11/00)	RI	07/06/10		Ongoing	Additional sampling planned Fourth quarter 2010	riverbank work	TBD	plow	100	Waiting on SCE to be completed	e se in			2008					
Wilame	tte 20s	55 6.8		Foot of N	Thiessen Ken Thiessen	PH Agr for RVSCM	RI	07/06/10	Groundwater	Ongoing	Additional sampling planned Fourth quarter 2010	TBO	TBD	plow		Wating on SCE to be completed		I SUV	Same.					H.	
Willams	tie one		10	Foot of N	Ken	PH Agr for RVSCM	RI	07/06/10	Stormwater	N/A	No site-related stormwater outfalls	NA .	Insignificant pathway, n	none		NA .	N/A	N/A	N/A	N/A	NIA	N/A	N/A	N/A	N/A
Cove	tte 204		85	Foot of N	Thiessen	PH Agr for RI/SCM	Ri	07/06/10	Overwater Activities	NA	NA	N/A	No current source; fike			N/A	N/A	N/A	N/A	NA	NIA	NIA	N/A	N/A	N/A
Cow			EURO EV	Edgewater 5200 NW St	Thiessen	(11/00) Pre-PH Order for Ri		06/21/10	Overland	Alta	NA	N/A	N/A	none		NIA	N/A	NIA	NIA	N/A	NA	N/A	NIA	N/A	N/A
Rhone Po		55 7.0	_	Helens 6200 NW St	Dave	Pre-PH Order for R		06/21/10	Transport/offeet Picw	N/A	N/A	N/A	N/A	none		N/A	NA	NA	N/A	N/A	N/A	N/A	NA	N/A	N/A
Rhone Po		55 7.0	-	Helens 6200 NW St	Dave	(1999) Pre-PH Order for R (1999)		06/21/10	Countyplac folions	Ongoing	SCE Report and Alternative	SCE Report in revision - 9/2010	Pathway is complete	p.High		Waiting on SCE to be completed	interim measure pilot study ongoing;		to					-	
	ulenc 15			6200 NW St Holens	Dave Lacey	Pre-PH Order for R (1999)	i Ri	08/21/10	Groundwater (plume discharge to City Outfal 228)		Phased dry weather flow investigation completed	Part of SCE 9/2010	Pattiway is complete	pHigh	p High	Waiting on SCE to be completed	interim measures implemented	Interim SCMs slormwater fir to prevent go infiltration, effectiveness monitoring ongoing	ora V	Uning of entire 2, system in progre- early measures r effective, expect to be complete 3 quarter 2010	ss, not ed ird				

				ources of	contamination to	the river				2 2														
	Site	e infor	rmation		Projec	ct status				Source Cor	itrol Evali					Source	e Control	Decisions	(SCDs) ar	nd Status o	f Source Co	ntrol N	leasures	(SCMs)
Site name	ECSI#	River mile	Address	DEQ PM	Type of agreement directing source control	Project status	Date last modified (m-d-y)	SCE Pathway	Status of SCE	Major SCE tasks to be completed	Schedule for completing SCE	Basis for determination is not pathway determination	Pathway priority level		Status of EPA review of SCE decision	Source control alternatives evaluation and schedule (m-y)	n Selected SCMs	Status of EPA review of SCM selection decision	SCM activities completed to date (m-y)	Mass or volume of contaminants controlled	Additional Proposed SCM activities to be done and schedule (m- y)	Date SCM completed (m-y)	Status of EPA review of completed SCM	Operaton and maintenance requirements
Rhone Poulen			6200 NW St Helens 6200 NW St	Dave Lacey	Pre-PH Order for RI (1999)	RI	06/21/10	Stormwater	Ongoing	Complete SCE write up	Part of SCE 9/2010	Waiting on SCE to be completed		level	Waiting on SCE to be completed									
Rhone Poulen			Helens 6200 NW St	Lacey Dave	Pre-PH Order for RI (1999) Pre-PH Order for RI	PG	06/21/10	Overwater Activities Other - historical	N/A	N/A	N/A	N/A	none		N/A	N/A	N/A	NA	N/A	N/A	N/A	N/A	N/A:	N/A
Rhone Poulent	155		Helens 6200 NW St	Lacey Dave	(1999) Pre-PH Order for RI	101	06/21/10	drainage dach Other - current NPDES	Ongoing	Complete remedial investigation	Part of SCE 9/2010 Part of SCE	Waiting on SCE to be completed Waiting on SCE to be	pLow		Waiting on SCE to be completed									
McCormick &	74	7.0E	Helens 5900 N Edgewater	Scott	(1999) Superfund agreemen	remedy		permitted discharge Overland	Ongoing	Data collection for PH COI	9/2010	completed	pLow		Waiting on SCE to be completed.									
McCormick &	100		Street 6900 N	Manzano	with EPA	implemen ed remedy	03/09/06	Transport/Sheet Flow	Completed			Pathway is complete	High	To a	Complete					6,200 gallons of creosote recovered		EEN	EPA reviewed and commented.	RUP 16
Baxter	74	7.0E	Edgewater Street 6900 N	Manzano	Superfund agreement with EPA	ed	03/09/06	Bank Erosion	Completed	Contraction of the last		Pathway is complete	High		Complete		contaminated soil removal,			from groundwater, 33,000 tons of contaminated soil and		1	EPA reviewed and	
McCormick & Baxter	74	7.0E	Edgewater Street	Scott Manzano	Superfund agreement with EPA	remedy implement ed	03/09/06	Groundwater	Completed			Pathway is complete	High		Complete	Avgard St	wall, sediment cap, riparian soil	The same of the	all SCMs have been implemented	debris removed, 23 acres of contaminated	- Committee -	300	EPA reviewed and	periodic inspection and maintenance,
McCormick & Baxter	74	7.0E	6900 N Edgewater Street	Scott Manzano	Superfund agreement with EPA	remedy	03/09/06	Stormwater	Completed		TALES !	Pathway is complete	High	High	Complete	P. C. Cardo	cap, upland soil cap, creosote			sediment capped, 8 acres of			commented. EPA reviewed	effectiveness monitoring site use restrictions
McConnick & Baxler	74	7.0E	6900 N Edgewater	Scott Manzano	Superfund agreement with EPA	remedy	03/09/06	Overwater Activities	Completed			Pathway is complete	High			CONTRACTOR OF THE PARTY OF THE	extraction			contaminated bank soil capped, 35 acres of contaminated			and commented. EPA reviewed	
			Street	PHILLEGIS	WWIEFA	ed						r sumay is comprise	riga	1999	Complete			E/44-31	Later Inc.	upland soil capped			and commented.	
McCormick & Baxter	74	7.0E	6900 N Edgewater Street	Scott Manzano	Superfund agreement with EPA	remedy implement ed	03/09/06	Other	NA			NA	none		N/A	N/A	NA	N/A	N/A	N/A.	N/A	N/A	N/A	N/A
Arkema	398	7.2 W	6400 NW Front	Mutt McClincy	Pre-PH VCP Formal Agr for RVFS (9/98)	FS	08/03/10	Groundwater (Chlorobenzene/OOT- Plume)	Completed		Completed April 07	Pathway is complete	High		EPA May 07 Completed	Draft focused feasibility study (ffs) for proposed hydraufic containment wall/system submitted May 08, Response to EPA/DEQ comments received Sept. 2008.	1,800 foot top of bank slurry wall, groundwater pump and treat system recommended.	Submitted for EPA review February 24, 2009	Interim SCMs include AS/SVE system, initiated in- situ chem-ox treatment		Groundwater containment system in design scheduled to be operational Jan 2012	Secound.		
Arkema	398	72W	6400 NW Front	Matt McClincy	Pre-PH VCP Formal Agr for RIFS (6/98)	FS	08/03/10	Groundwater (Hexevalent Chromium Plume)	Completed		Completed April 07	Pathway is complete	High		EPA May 07 Completed	Draft focused feasibility study (ffs) for proposed hydrautic containment wall/system submitted May 08, Response to EPADEQ comments received Sept. 2008.	1,800 foot top of bank slurry wall, groundwater pump and treat system recommended.	Submitted for EPA review February 24, 2009	Interim SCMs include in-situ calcium polysulfide treatment		Groundwater containment system in design scheduled to be operational Jan 2012			
Arkema	398	7.2 W	6400 NW Front		Pre-PH VCP Formal Agr for RVFS (9/98)	FS	08/03/10	Groundwater (Perchlorate Plume) Groundwater Lots 1, 2	Completed		Completed April 07	Pathway is complete.	High		EPA May 07 Completed	Draft focused feasibility study (ffs) for proposed hydraulic containment wall/system submitted May 08, Response to EPADEQ comments received Sept. 2008.	1,800 foot top of bank slurry wall, groundwater pump and treat system recommended,	Submitted for EPA review February 24, 2009	Bench scale treatability study completed April 2008		Groundwater containment system in design scheduled to be operational Jan 2012			
Arkema	398	7.2 W	6400 NW Front	Matt McClincy	Pre-PH VCP Formal Agr for RIFS (9/98)	FS	08/03/10	and northern portion of	Ongoing	Rhone Poulenc SCE	4th Quarter 2010	Pathway is complete	p High				Province:							
Arkema	398	7.2 W	6400 NW Front	Matt McClincy	Pre-PH VCP Formal Agr for RIFS (9/98)	FS	08/03/10	Overland Transport/Sheet Flow	Ongoing	Part of Stormwater FFS	DEQ currently reviewing	Walting on SCE to be completed	to be determined	High	N/A	NA	N/A	NA	N/A	N/A	N/A	N/A	N/A	N/A
Arkema	398	7.2W	6400 NW Front	Matt McClincy	Pre-PH VCP Formal Agr for RVFS (9/98)	FS	08/03/10	Bank Erosion	Completed			River Bank soil contaminant levels exceed action levels	High		Anticipate Integrating with EPA In-water action	Review of dverbank remedial alternatives in progress	Timing of SCM to be coordinated with EPA Early Action		None					
Arkema	398	72W	6400 NW Front	Matt McClincy	Pre-PH VCP Formal Agr for RIFS (9/98)	FS	08/03/10	Stormwater	Completed			Contaminants in stormwater exceed screening values (AWQC)	High				DEQ Water Quality Mutal Agreement and Order signed for new stormwater collection and treatment system		Interim SCMs include BMPs, surface soil removals and surface soil caps		Abandon existing system, update temporary caps to limit stormwater transport, construct new stormwater collection and treatment system by Jan 2012			Parkers
Arkema	398	7.2 W	6400 NW Front	Matt McClincy	Pre-PH VCP Formal Agr for RIFS (9/98)	FB	08/03/10	Overwater Activities	N/A	N/A:	NZA	NA	none		N/A	N/A	N/A	NA	N/A	N/A	N/A	N/A	N/A	N/A
Arkema	398	7.2 W	5400 NW Front	Matt McClincy	Pre-PH VCP Formal Agr for RVFS (9/98)	FS	08/03/10	Other	N/A	N/A	N/A	N/A	none.		N/A	NA	N/A	N/A	N/A	N/A	N/A	N/A	NA	N/A
Air Liquide	395	7.2 W	6529 NW Front Ave.	Dave Lacey	Letter Agreement 1/09	XPA	06/21/10	Overland Transport/Sheet Flow	N/A	N/A	N/A	N/A	none		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Air Liquide	395	72W	8529 NW Front Ave.	Dave Lacey	Letter Agreement 1/09	XPA	06/21/10	Bank Erosion	N/A	N/A	N/A	N/A	none		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Air Liquide	395	72W	8529 NW Front Ave.	Dave Lacey	Letter Agreement 1/09	XPA	06/21/10	Groundwater	Ongoing	TBD	тво	Waiting on SCE to be completed	to be determined	p Med	Waiting on SCE completion									

	Confirm	ned or s	suspected so	urces of	contamination to th	e river				0	nal Frank	ation /CCEV				Source	Control	Decisions	(SCDs) an	d Status o	f Source Cor	ntrol M	easures	(SCMs)
			mation	1	Project					Source Cont	roi Evalu					Source	Control	Decisions	(0000) an	u otatao o			2000 2000	Carrier Maria
Site name	ECSI#	River mile	Address	DEQ PM	Type of agreement directing source	Project status	Date last modified	SCE Pathway	Status of SCE	Major SCE tasks to be completed	Schedule for completing SCE	Basis for determination is nee	ded Pathway	Site	Status of EPA review of SCE decision	Source control alternatives evaluation and schedule (m-y)	Selected SCMs	Status of EPA review of SCM selection decision	SCM activities completed to date (m-y)	Mass or volume of contaminants controlled	Additional Proposed SCM activities to be done and schedule (m- y)	Date SCM completed (m-y)	Status of EPA review of completed SCM	Operaton and maintenance requirements
		mae			control	3141.03	(m-d-y)					determination	priority level	priority level		, , , , , , , , , , , , , , , , , , ,				NO. LEWIS AVAILABLE	"			
Air Liquide	395	72W	6529 NW Front Ave.	Dave Lacey	Letter Agreement 1/09	XPA	06/21/10	Stormwater	Ongoing	Stormwater Assessment	4th Qtr 2010	Waiting on SCE to be completed	p Med		Waiting on SCE completion							100	N/A	N/A
Air Liquide	395	7.2 W	6529 NW Front Ave.	Dave Lacey	Letter Agreement 1/09		06/21/10	Overwater Activities	N/A	N/A	N/A	N/A	none		N/A N/A	N/A N/A	N/A N/A	N/A N/A	N/A N/A	N/A N/A	N/A N/A	N/A N/A	N/A	N/A
Air Liquide	3342	7.2 W	6529 NW Front Ave.	Dave Lacey	Letter Agreement 1/09	XPA	06/21/10	Other	N/A	N/A	N/A	N/A	none		nen.	Tex.	. 1900	1700						
Metro Central Transfer Station	1398	7.2 W	6161 NW 61 Ave	Dave Lacey	Letter Agreement 1/10	XPA	06/21/10	Groundwater	Ongoing	TBD	TBD	Waiting on SCE to be completed	to be determined		Waiting on SCE completion									
Metro Central Transfer Station	1398	7.2 W	6161 NW 61 Ave	Dave Lacey	Letter Agreement 1/10	XPA	06/21/10	Stormwater	Ongoing	Stormwater Assessment	4th Qtr 2010	Waiting on SCE to be completed	p Med	p Med	Waiting on SCE completion									
Metro Central Transfer Station	1398	7.2 W	6161 NW 61 Ave	Dave Lacey	Letter Agreement 1/10	XPA	06/21/10	Overwater Activities	N/A	N/A	N/A	N/A	none		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Metro Central Transfer Station	1398	7.2 W	6161 NW 61 Ave	Dave Lacey	Letter Agreement 1/10	XPA	06/21/10	Other	N/A	NA	N/A	N/A	noce		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Schnitzer Investment Doane Lake	395	7.2 W	6529 NW Front Ave.	Dave Lacey	Agreement negotiations ongoing	XPA	06/21/10	Overland Transport/Sheet Flow	Not Started	TBO	No current schedule.	N/A	to be determined		TBO	TBD	TBO	TBD	ТВО	TBD	TBD	ТВО	TBD	TBD
Schnitzer Investment Doane Lake	395	72W	6529 NW Front Ave.	Dave Lacey	Agreement negotiations ongoing	ХРА	06/21/10	Bank Erosion	N/A	N/A	N/A	N/A	N/A		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Schnitzer Investment Doane Lake	395	7.2 W	6529 NW Front Ave.	Dave Lacey	Agreement negotiations ongoing	XPA	06/21/10	Groundwater	Not Started	TBD	No current schedule.	TBD	p Med	p Med	TBO	TBD	тво	TBD	TBD	TBD	TBD	TBD	TBO	TBD
Schnitzer Investment Doane Lake	395	7.2 W	6529 NW Front Ave.	Dave Lacey	Agreement negotiations ongoing	ХРА	06/21/10	Stormwater	Not Started	ТВО	No current schedule.	TBD	p Med		TBO	TBO	ТВО	TBD	TBD	TBD	тво	TBD	TBO	TBD
Schnitzer Investment Doane Lake	395	7.2 W	6529 NW Front Ave.	Dave Lacey	Agreement negotiations ongoing	XPA	06/21/10	Overwater Activities	N/A	N/A	N/A	NA	N/A		N/A	N/A	N/A	N/A	N/A	N/A	N/A TBD	N/A TBD	N/A TBD	N/A TBD
Schnitzer Investment Doane Lake	395	7.2 W	6529 NW Front Ave.	Dave Lacey	Agreement negotiations ongoing	XPA	06/21/10	Other	Not Started	TBD	No current schedule.	TBD	to be determined		TBD Waiting on SCE to	TBD	TBD	TBD	TBO	TBD	160	100	100	,,,,,
GS Roofing	117	7.5 W	6350 NW Front	Ken Thiessen	VCP - PH Agr	RI	07/06/10	Overland Transport/Sheet Flow	Ongoing	Finish characterization by First Quarter 2011	TBD	TBD	p Law		be completed. Waiting on SCE to									
GS Roofing	117	7.5 W	6350 NW Front	Ken Thiessen	VCP - PH Agr	Ri	07/06/10	Bank Erosion	Ongoing	Finish characterization by First Quarter 2011	TBD	TBD	p Low		be completed. Walting on SCE to									
GS Roofing	117	7.5 W	6350 NW Front	Ken Thiessen	VCP - PH Agr	RI	07/06/10	Groundwater	Ongoing	Finish characterization by First Quarter 2011	TBD	TBD	p Low	p Med	be completed.					-				
GS Roofing	117	7.5 W	6350 NW Front	Ken Thiessen	VCP - PH Agr	RI	07/06/10	Stormwater	Ongoing	Follow up stormwater system characterization by First Quarter 2011	TBO	Complete	p Med	pance	Waiting on SCE to be completed.	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
GS Roofing	117	7.5 W	6350 NW Front	Ken Thiessen	VCP - PH Agr	RI	07/06/10	Overwater Activities	N/A	N/A	N/A	N/A	none	-	N/A	A STATE OF THE PARTY OF THE PAR	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
GS Roofing	117	7.5 W	6350 NW Front	Ken Thiessen	VCP - PH Agr	RI	07/06/10	Other	N/A	N/A	N/A	N/A	none Medium	-	N/A EPA reviewed &	N/A	10000	100						
Triangle Park (N PDX Yard)	277	7.5 E	5828 N Van Houten	Mark Ader EPA	Federal PPA 2006	EE/CA	08/02/10	Overland Transport/Sheet Flow	Completed				based on DEQ 2004		commented on DEQ's 2004 SCD	EPA EE/CA planned fo 4th Quarter 2010								
Triangle Park (N PDX Yard)	277	75E	5828 N Van Houten	Mark Ader EPA	Federal PPA 2008	EE/CA	08/02/10	Bank Erosion	Completed				Medium based on DEQ 2004		EPA reviewed & commented on DEQ's 2004 SCD	EPA EE/CA planned fo 4th Quarter 2010								
Triangle Park (N PDX Yard)	277	7.5 E	5828 N Van Houten	Mark Ader EPA	Federal PPA 2006	EE/CA	08/02/10	Groundwater	Completed				TBD based on DEQ 2004		EPA reviewed & commented on DEQ's 2004 SCD	EPA EE/CA planned fo 4th Quarter 2010	1							
Triangle Park (N POX Yard)		7.5 E	5828 N Van Houten	Mark Ader EPA	Federal PPA 2006	EE/CA	08/02/10	Stormwater	Completed				Medium based on DEQ 2004	HOUSING	EPA reviewed & commented on DEQ's 2004 SCD	Alb Ouarter 2010	or .							
Triangle Park (N PDX Yard)	277	7.5 E	5828 N Van Houten	Mark Ader EPA	Federal PPA 2006	EE/CA	08/02/10	Overwater Activities	Completed				none		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Triangle Park (N PDX Yard)	277	7.5 E	5028 N Van		Federal PPA 2006	EE/CA	08/02/10	Other - Petroleum pipeline enters at south end of site from beneath the river		-			Low based on DEQ 2004		EPA reviewed & commented on DEQ's 2004 SCD	4th Ougster 2010	or							
Gould Electronics, In aka GA-TEK	c 49	7.5W	5909 NW 61si Ave	EPA lead Chip Humphre	EPA Consent Decree	0.00	03/15/06	Overland Transport/Sheet Flow	N/A	N/A	NIA	N/A	none		N/A	N/A	NA	N/A	N/A	N/A	N/A	N/A	N/A	NA

			suspected s	sources of	contamination to	the river				Source Con	trol Evalu	uation (SCF)		_		Source	Control	Docisions	(SCDs) s	ad Ctatus a	£ C C	4 1 1 1		(0.011.)
		Inton	mauon	T -		status					Lorzvan	Basis for determinati	·	a pantico		Source	Control	Decisions	(SCDS) at	iu Status o	f Source Co	ntrol M	leasures	(SCMs)
Site name	ECSI#	River mile	Address	DEQ PM	Type of agreement directing source control	Project status	Date last modified (m-d-y)	SCE Pathway	Status of SCE	Major SCE tasks to be completed	Schedule for completing SCE		Pathway priority level	Site priority level	Status of EPA review of SCE	Source control alternatives evaluation and schedule (m-y)	Selected SCMs	Status of EPA review of SCM selection decision	SCM activities completed to date (m-y)	Mass or volume of contaminants controlled	Additonal Proposed SCM activities to be done and schedule (m- y)	Date SCM completed (m-y)	Status of EPA review of completed SCM	Operaton and maintenance requirements
Gould Electronics, Inc. aka GA-TEK	49	7.5W	5909 NW 61st Ave	EPA lead; Chip Humphrey	EPA Consent Decree		03/15/06	Bank Erosion	N/A	NA	N/A	N/A	none		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Gould Electronics, Inc aka GA-TEK	49	7.5W	5909 NW 61st Ave	EPA lead, Chip Humphrey	EPA Consent Decree		03/15/06	Groundwater	Completed			Insignificant pathway, no actions recommended	Low		EPA issued groundwater NFA based upon risk assessment		No SCM needed						EPA lead	
Gould Electronics, Inc aka GA-TEK	49	7.5W	5909 NW 61st Ave	EPA lead: Chip Humphrey	EPA Consent Decree		03/15/06	Groundwater/ City Storm Sewer	Completed			Pathway has been eliminated	none	Low	EPA lead									
Gould Dectronics, Inc. aka GA-TEK	49	7.5W	5909 NW 61st Ave	EPA lead; Chip Humphrey	EPA Consent Decree		03/15/06	Stormwater	Completed			Historically pathway existed. Current dischargle insignificant pathway, no actions recommended	Low	Low	EPA lead		1) Contaminated soil removal and containment (landf8); 2) Sediment removal; 3) RCRA waste containment; 4) Removed waste pond 5) O&M ongoing						EPA lead	
Gould Dectronics, Inc. aka GA-TEK	49	7.5W	5909 NW 61st Ave	EPA lead, Chip Humphrey	EPA Consent Decree		03/15/06	Overwater Activities	NA	N/A	N/A	N/A	none		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Gould lectronics, Inc aka GA-TEK Willbridge	49	7.5W	5909 NW 61st Ave	EPA lead; Chip Humphrey	EPA Consent Decree		03/15/06	Other - Historic and Current NPDES permit	Completed			Historically pathway existed. Current discharge insignificant pathway, no actions recommended	Low		EPA lead		Removed waste pond (East Doane Lake); O&M ongoing						EPA lead	
(Kinder Morgan, Chevron, Cenoco Philips)	1549	7.7 W	Front Ave & NW Doane	Mike Romero	Pre-PH Consent Order (3/94)	RIFS	06/30/10	Overland Transport/Sheet Flow	Completed			Insignificant pathway, no actions recommended	Low		Submitted to EPA fall 2004; no comments		No SCM needed						N/A	
Wilbridge (Kinder Morgan, Chevron, Conoco Philips)	1549		Front Ave & NW Doane	Mike Romero	Pre-PH Consent Order (3/94)	RIFS	06/30/10	Bank Erosion	Completed	Erodable Soils sampling conducted	Spring 2010	Insignificant pathway, no actions recommended	Low		Submitted to EPA fall 2004; no comments.								N/A	
Willbridge (Kinder Morgan, Chevron, Conoco Phillips)	1549		Front Ave & NW Doane		Pre-PH Consent Order (3/94)	RIFS	06/30/10	Groundwater	Ongoing	Chevron and Conoco conducting one GW SCE, Kinder Morgan conducting individual SCE	2nd qtr 2011 for Kinder Morgan, 4th qtr 2010 for Chevron/Conoco	GW suspected migration pathway	High		1st SCE submitted to EPA fatt 2004; no comments. Waiting for revised GW SCE that includes deep groundwater and new size info to be completed	no alternatives evaluation needed		Proposed SCM submitted to EPA fail 2004, no comments	hydraulic containment and treatment		containment system installed 2006,			Effectiveness monitoring and operation and maintenance on going
Willbridge (Kinder Morgan, Chevron, Conoco Phillips)	1549		Front Ave & NW Doane	Mike Romero	Pre-PH Consent Order (3/94)	RVFS	06/30/10	Stormwater	Ongoing	Stomwester characterization started fall 07, Chevron SCE complete	4th Quarter 2010	Walting on SCE to be completed at KinderMorgan and Conoco, Chevron SCE under review	to be determined	High	Wailing on SCE to be completed at 3 facilities.		Leaking stormwater covenanyce system repaired to stop GW inflaration at Conoco and KM (Saltzman creek)		OF-22 repaired 8/09, Conoco and Ceberon ste specifo repairs, KM- Saltzman creek repairs		Repair stormwater system begun 11/07			
Willbridge (Kinder Morgan, Chewon, Conoco Philips)	1549		Front Ave & NW Doane	Mike Romero	Pre-PH Consent Order (3/94)	RIFS	06/30/10	Overwater Activities	N/A	N/A	NVA	No known current sources (spills reported to OERS)	none		N/A	N/A	: N/A	N/A	N/A	NA	N/A	N/A	N/A	N/A
Willbridge (Kinder Morgan, Chevron, Conoco Philips)	1549		Front Ave & NW Doans	Mike Romero	Pre-PH Consent Order (3/94)	RVFS	06/30/10	Other	NA	N/A	N/A	N/A	none		N/A	N/A:	N/A	N/A	N/A	N/A	N/A	N/A	N/A	NA
McCall Oil			550 NW Front	Jim Orr	PH Agr for RVCSM (3/00)	RI	07/01/10	Overland Transport/Sheet Flow	Ongoing	Part of stormwater characterization	1st Qtr 2011	Waiting on SCE to be completed	pLow		Waiting on SCE to be completed.	NA NA	NA .	NA	NA NA	NA	NA NA	NA	NA NA	NA NA
McCall Oil	134	7.8 W 55	550 NW Front	Jim Orr	PH Agr for RI/CSM (3/00)	Ri	07/01/10	Bank Erosion	Ongoing	Additional riverbank sampling	1st Qtr 2011	Waiting on SCE to be completed	p Low		Waiting on SCE to be completed.	NA	NA NA				NA	NA:	NA .	NA NA
McCall Oil			550 NW Front		PH Agr for RI/CSM (3/00) PH Agr for RI/CSM		07/01/10	Groundwater	Ongoing	Additional groundwater data needed Stormwater characterization	1st Qtr 2011	Walting on SCE to be completed	p Med	p Med	Waiting on SCE to be completed.	NA .	NA				NA	NA	NA.	NA
McCall Oil	104	7.0 VV 55	550 NW Front	Jan Orr	(3/00)	RI	07/01/10	Stormwater	Ongoing	and evaluation	1st Qtr 2011	Waiting on SCE to be completed	p Med		Waiting on SCE to be completed.	NA	NA				NA	NA	NA	NA.

	Confirm	ed or s	uspected so	urces of c	ontamination to th	e river				Source Conf	trol Evalu	ation (SCE)				Source	Control	Decisions	(SCDs) an	d Status of	f Source Cor	ntrol M	easures	(SCMs)
	Site	inform	nation	_	Project	status				Goding Goil		Basis for determination is nee		control	Status of EPA	Source control		Status of EPA	SCM activities	Mass or volume of	Additional Proposed SCM activities to be	Date SCM	Status of EPA review of	Operaton and
Site name	ECSI#	River mile	Address	DEQ PM	Type of agreement directing source control	Project status	modified (m-d-y)	SCE Pathway	Status of SCE	Major SCE tasks to be completed	Schedule for completing SCE	Pathway determination	Pathway priority	Site priority level	review of SCE decision	alternatives evaluation and schedule (m-y)	Selected SCMs	review of SCM selection decision	completed to date (m-y)	contaminants controlled	done and schedule (m- y)	(m-y)	completed SCM	maintenance requirements
McCall Oil	134	7.8 W 5	5550 NW Front	Jim Orr	PH Agr for RI/CSM (3/00)	RI	07/01/10	Overwater Activities	Ongoing	Pathway needs to be evaluated in SCE	1st Qtr 2011	Waiting on SCE to be completed	p Low	level	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
McCall Oil	134	7.8 W 5	5550 NW Front	Jim Orr	PH Agr for RVCSM (3/00)	RI	07/01/10	Other	N/A	N/A	N/A	N/A	none		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Anderson Brothers Property	970		5275 & 5315 NW St. Helens Rd.	Bob Schwarz	ICP	NFA	12/10/09	Overland Transport/Sheet Flow	Completed	None	N/A	N/A	none	Low	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Anderson Brothers Property	970		5275 & 5315 NW St. Helens Rd.	Bob Schwarz	ICP	NFA	12/10/09	Bank Erosion	Completed	None	N/A	N/A	none		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Anderson Brothers	970		5275 & 5315 NW St. Helens Rd.	Bob Schwarz	ICP	NFA	12/10/09	Groundwater	Completed	None	N/A	N/A	none		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Property Anderson Brothers	970		5275 & 5315 NW St. Helens Rd.	Bob Schwarz	ICP	NFA	12/10/09	Stormwater	Completed	None	NA NA	Complete	Low	A series	December 2009	NA NA	NA	NA NA	NA	NA	NA NA	NA.	NA NA	NA
Property Anderson Brothers	970		5275 & 5315 NW St. Helens Rd.	Bob Schwarz	ICP	NEA	12/10/09	Overwater Activities	Completed	None	N/A	N/A	none		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Anderson Brothers Property	970	8 W	5275 & 5315 NW St. Helens Rd.	Bob Schwarz	ICP	NFA	12/10/09	Other	Completed	None	N/A	N/A	none:		N/A	NA	N/A	N/A	N/A	N/A	NA	N/A	N/A	N/A
Chevron Asphalt	1281	8.0 W	5501 NW Front	Mark Pugh	PH Letter Agr for SCE (6/06)	O&M	05/25/10	Overland Transport/Sheet Flow	N/A	N/A	N/A	N/A	none		N/A	N/A	NA	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Chevron Asphalt	1281	8.0 W	5501 NW Front	Mark Pugh	PH Letter Agr for SCE (6/06)	O&W	05/25/10	Bank Erosion	N/A	N/A	N/A	NA	none		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Chevron Asphalt	1281	8.0 W	5501 NW Front	Mark Pugh	PH Letter Agr for SCE (6/06)	OAM	05/25/10	Groundwaler	Completed	NIA	N/A	insignificant pathway, no actions recommended	Low	Low	EPA has reviewed and commented on SCD	No measures needed	N/A	N/A	N/A	N/A	N/A of Additional cleanout of	N/A	N/A EPA has	N/A
Chevron Asphalt	1281	8.0 W	5501 NW Front	Mark Pugh	PH Letter Agr for SCE (6/06)	MAG	05/25/10	Stormwater	Completed	NA	N/A	Pathway is complete	Low		EPA has reviewed and commented on SCD	Completed,	In-line sediment removal; enhanced BMPs	Completed and ongoing Source control measures	basin inserts,	approximately 1 ton of catch basin and in- tine solids removed to	line segment completed		reviewed and commented on	BMPs as documented in revised SWPCP
Chevron Asphalt	1281	80W	5501 NW Front	Mark Pugh	PH Letter Agr for SCE (6/06)	MAO	05/25/10	Overwater Activities	N/A	N/A	N/A	N/A	none		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Chevron Asphalt	1281	8.0 W	5501 NW Front	Mark Pugh	PH Letter Agr for SCE (6/06)	O&M	05/25/10	Other	N/A	N/A	N/A	N/A	none	1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A N/A	N/A N/A
Willbridge Railyard	3395	80W	5814 NW Dogne Ave.	Shawn Rapp	Letter Agr for XPA	XPA	07/27/10	Overland Transport/Sheet Flow	N/A	N/A	N/A	N/A	none		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Willbridge Railyard	3395	8.0 W	5814 NW Doane Ave.	Shawn Rapp	Letter Agr for XPA	XPA	07/27/10	Bank Eroskon	N/A	N/A	N/A	NA	none	7.19	N/A	N/A	N/A	N/A	N/A	NIA	N/A	NA	160	180
Wilbridge Railyard	3395	8.0 W	5814 NW Doane Ave.	Shawn Rapp	Letter Agr for XPA	XPA	07/27/10	Groundwater	Ongoing	None	2nd Qtr 2011	No known current sources (spills will be reported to OERS)	plcw	plow	Waiting on SCE completion	No measures needed								
Wilbridge Rafyard	3395	8.0 W	5814 NW Doane Ave.	Shawn Rapp	Letter Agr for XPA	XPA	07/27/10	Stormwater	Ongoing	Working with neighboring sites to determine pipe locations, flow, ownership and condition		Waiting on SCE to be completed	plew		Waiting on SCE completion		Pending SCE completion. Str piping receiving contaminants from city streets							
Willbridge	3395	8.0 W	5814 NW Doane Ave.	Shawn Rapp	Letter Agr for XPA	XPA	07/27/10	Overwater Activities	N/A	N/A	NA	N/A	none		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Railyard Wilbridge Railyard	3395	aow	EREA NIM	Shawn	Letter Agr for XPA	XPA	07/27/10	Other	N/A	N/A	N/A	NA	none		NIA	NIA	N/A	N/A	N/A	N/A	NIA	N/A	N/A	N/A
	2378	8.1 W	5034 NW Front Ave	Mike Romero	Mary and a second			Overtand Transport/Street Flow									FIN		Links.		E See			The same
Glacier	2378	8.1 W	5034 NW Front	Mike	-			Bank Erosion		Complete Complete							010			-		-		
Northwest Inc	2370	8.1 W	5034 NW Front	Romero Mike Romero		1110		Groundwater	DOM:									Million Co.		I MALE NO.			-	
Northwest inc Glacier	2978	8.1 W	5034 NW Front	Mike	Part of Front Ave LP site, see ESCI#1239		1015	Stormwater		The second second		Sugar Line		100		State of the last								
Northwest inc	2378	6.1 W	5034 NW Front			-		Overwater Activities	7		- STORING									THE REAL PROPERTY.				-
Northwest in Glacier Northwest in	-	8.1 W		-				Other			N. I													Mar No.
Front Ave Li	1239	8.2 W	4950, 5034 & 5200 NW From	Mke	VCP Letter Agr for PA (1/02)	RI	06/30/10	Overland Transport/Sheet Flow	NA	NA	N/A	N/A	none	C SI	NA NA	NA .	NA	NA NA	NA NA	NA NA	N/A	N/A	N/A	N/A
	_		4950, 5034 & 5200 NW From	-	VCP Letter Agr for PJ (1/02)	Ri	05/30/10	Bank Erosion	Ongoing	Conducting XPA and SCE	40hQtr 2010	Walting on SCE to be completed	pLow	-	Walting on SCE to be completed.			1					15000	The Court of the C
Front Ave LI	1239	8.2 W	4950, 5034 & 5200 NW Fron	Mike Romero	VCP Letter Agr for PA (1/02)	RI	06/30/10	Groundwater	Ongoing	Conducting XPA and SCE	4th Otr 2010	Waiting on SCE to be completed	pLow	plow	Wating on SCE to be completed.									
Front Ave L	P 1239	8.2 W	4950, 5034 & 5200 NW Fron	Mike Romero	VCP Letter Agr for P/ (1/02)	RI	06/30/10	Stormwater	Ongoing	Conducting XPA, additional sampling needed for SCE completion	4th Qtr 2010	Waiting on SCE to be completed	to be determine	d	Waiting on SCE to be completed.		THE REAL PROPERTY.	Water 1						BELIEF
		1	4950, 5034 & 5200 NW Fron	-	The week of the P	RI	06/30/10	Overwater Activities	N/A	N/A	N/A	No known current sources (spills reporte to OERS)		1 4	N/A	N/A	N/A	NA	N/A	N/A	NA	N/A	NA	NA

С				ources of	contamination to t					Source Cor	trol Eval	uation (SCE)				Course	Cantral	Davida	(00D)	1011				
	Site	intorn	mation		200	t status				Tource con	THOI EVAI	Basis for determination		e control		Source	Control	Decisions	(SCDs) ar	d Status o	f Source Co	ntrol N	leasures	(SCMs)
Site name	ECSI#	River mile	Address	DEQ PM	Type of agreement directing source control	Project status	Date last modified (m-d-y)	SCE Pathway	Status of SCE	Major SCE tasks to be completed	Schedule for completing SCE	Pathway determination			Status of EPA review of SCE	Source control alternatives evaluation and schedule (m-y)	Selected SCMs	Status of EPA review of SCM selection decision	SCM activities completed to date (m-y)	Mass or volume of contaminants controlled	Additional Proposed SCM activities to be done and schedule (m- y)	Date SCM completed (m-y)	Status of EPA review of completed SCM	Operaton and maintenance requirements
Front Ave LP	1239	8.2 W	4950, 5034 & 5200 NW Front	Mike Romero	VCP Letter Agr for PA (1/02)	RI	06/30/10	Other	N/A	N/A	N/A	N/A	none	No.	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
US Navy Reserve	5109	82W	6735 North Basin Avenue	Jim Oir	Agreement Not Established	RVSCE	07/29/10	Overland Transport/Sheet Flow	Not Started	Not Started	Unknown Waiting for Navy Funding	Unknown	p Med	100	Waiting on SCE to be completed.			NAME OF STREET	-		E BICE			
US Navy Reserve	5109	82W	6735 North Basin Avenue	Jim Orr	Agreement Not Established	RVSCE	07/29/10	Bank Erosion	Not Started	Not Started	Unknown Waiting for Navy Funding	Unknown	p Med		Waiting on SCE to be completed.		all real					T. Marie		
US Navy Reserve	5109	82E	6735 Norh Basin Avenue	Jim Orr	Agreement Not Established	RVSCE	07/29/10	Groundwater	Not Started	Not Started	Unknown Waiting for Navy Funding	Unknown	p Med	p Med	Waiting on SCE to be completed.									
US Navy Reserve	5109	82E	6735 North Basin Avenue	Jim Orr	Agreement Not Established	RYSCE	07/29/10	Stormwater	Not Started	Not Started	Unknown Waiting for Navy Funding	Unknown	p Med		Waiting on SCE to be completed.		V-500 N	(c) L	1.52		No. of Contrast of			
US Navy Reserve	5109	82E	6735 Norh Basin Avenue	Jim Orr	Agreement Not Established	RVSCE	07/29/10	Overwater Activities	Not Started	Not Started	Unknown Waiting for Navy Funding	Unknown	p Med		Wating on SCE to be completed									
US Navy Reserve	5109	82E	6735 North Basin Avenue	Jim Orr	Agreement Not Established	RISCE	07/29/10	Other	Not Started	Not Started	Unknown Waiting for Navy Funding	Unknown	p Med		Waiting on SCE to be completed.									
USCG	1338	82E	6767 N Basin Ave.	Shawn Rapp	VCP Letter Agr (2/04)	Rí	07/01/10	Overland Transport/Sheet Flow	Ongoing		4th Quarter 2010	Insignificant pathway, no actions recommended	pLow		Waiting on SCE to be completed.									
USCG	1338	8.2 E	6767 N Basin Ave.	Shawn Rapp	VCP Letter Agr (2/04)	RI	07/01/10	Bank Erosion	Ongoing		4th Quarter 2010	Insignificant pathway, no actions recommended	pLow		Waiting on SCE to be completed.									
uscg	1338	82E	6767 N Basin Ave.	Shawn Rapp	VCP Letter Agr (2/04)	RI	07/01/10	Groundwater	Ongoing		4th Quarter 2010	Insignificant pathway, no actions recommended	p Low		Waiting on SCE to be completed.									
USCG	1338	82E	6767 N Basin Ave.	Shawn Rapp	VCP Letter Agr (2/04)	RI	07/01/10	Stormwater	Ongoing	Sampling stormwater system	4th Quarter 2010	Waiting on SCE to be completed	p Med	p Med	Waiting on SCE to be completed.									
USCG	1338	8.2 E	6767 N Basin Ave.	Shawn Rapp	VCP Letter Agr (2/04)	RI	07/01/10	Overwater Activities	Ongoing		4th Quarter 2010	No known current sources (spills will be reported to OERS)	Low		Waiting on SCE to be completed.									
USCG	1338	8.2 E	6767 N Basin Ave.	Shawn Rapp	VCP Letter Agr (2/04)	RI	07/01/10	Other	N/A	N/A	N/A	N/A	none		N/A	N/A	N/A	N/A	N/A	NA	N/A	N/A	N/A	N/A
Kittridge	2442	8.3 W 4	4959 NW Front	Matt McClincy	PH Letter Agr for XPA (9/00)	NFA	03/13/06	Overland Transport/Sheet Flow	Completed			Insignificant pathway, no actions recommended	Low	H	EPA reviewed and commented 8/2002		No SCM needed							
Kittridge	2442	8.3 W 4	4959 NW Front	Matt McClincy	PH Letter Agr for XPA (9/00)	NFA	03/13/06	Bank Erosion	NA			N/A	none		EPA reviewed and commented 8/2002		No SCM needed		-2-1					
Kitridge	2442	8.3 W 4	1959 NW Front	Matt McClincy	PH Letter Agr for XPA (9/00)	NFA	03/13/06	Groundwater	Completed			Insignificant pathway, no actions recommended	Low	Low	EPA reviewed and commented 8/2002		No SCM needed				-			
Kittridge	2442	8.3 W 4	1959 NW Front	Matt McClincy	PH Letter Agr for XPA (9/00)	NFA	03/13/06	Stormwater	Completed			Insignificant pathway	Low		EPA reviewed and commented 8/2002		No SCM needed						Mary 1	
Kittridge	2442 8	8.3 W 4	1959 NW Front	Matt McClincy	PH Letter Agr for XPA (9/00)	NFA	03/13/06	Overwater Activities	N/A	N/A	N/A	N/A	none		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	NA
Kitridge	2442 8	8.3 W 4	1959 NW Front	Matt McClincy	PH Letter Agr for XPA (9/00)	NFA	03/13/06	Other	N/A	N/A	N/A	N/A	none		NA	NA	N/A	N/A	N/A	N/A	N/A	N/A	N/A	NIA
red Devine	2365	83E 6	8211 N Ensign	Karen Tarnow	VCP Letter Agreement 11/06	XPA	07/27/10	Overland Transport/Sheet Flow	NA	N/A	NIA	No known current sources (spills will be reported to OERS)	none		N/A	NA	N/A	N/A	N/A	NA	N/A	N/A	N/A	N/A
red Devine	2365	8.3 E 6	8211 N Ensign	Karen Tarnow	VCP Letter Agreement 11/06	XPA	07/27/10	Bank Erosion	NIA	N/A	No current schedule.	No known current sources (spills will be reported to OERS)	none		N/A	N/A	N/A	N/A	N/A	NA	NA	N/A	NA	N/A
red Devine	2365	8.3 E 6	5211 N Ensign	Karen Tamow	VCP Letter Agreement 11/06	XPA	07/27/10	Groundwater	N/A	N/A	No current schedule.	No known current sources (spills will be reported to OERS)	none	pLow	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	NA
red Devine	2365	8.3 E 6	5211 N Ensign	Karen Tamow	VCP Letter Agreement 11/06	ХРА	07/27/10	Stormwater	Ongoing	Complete stormwater system characterization	4th Otr 2010	to be determined	plow		Walting on SCE to be completed.				BMPs such as catch basin inserts, inspection and catch basin cleanout on periodic basis					
red Devine		The second		Karen Tarnow Karen	VCP Letter Agreement 11/06 VCP Letter Agreement	XPA	07/27/10	Overwater Activities	N/A	N/A	N/A	No known current sources (spits reported to OERS)	none		N/A	NA	N/A	NA	N/A	NA	N/A	N/A	N/A	N/A
reightliner ruck Plant	2365 8 2368 8	TOTAL PROPERTY AND PERSONS ASSESSMENT OF PERSONS ASSESSMENT ASSESSMENT ASSESSMENT ASSESSMENT ASSESSMENT ASSESSMENT ASSESSMENT ASSESS	6936 N Fathorn	Tarnow	11/06 PH Agr for RI/SCM (12/02)	XPA RI	07/27/10	Other	N/A N/A	N/A N/A	N/A N/A	N/A N/A	none		N/A N/A	N/A N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

				ources of	contamination to th					Source Conf	trol Evalu	ation (SCE)				Source	Control	Decisions	(SCDs) an	d Status o	f Source Cor	ntrol M	easures	(SCMs)
Site name	T	Phon	Address	DEQ PM	Type of agreement directing source control	Project status	Date last modified (m-d-y)	SCE Pathway	Status of SCE	Major SCE tasks to be completed	Schedule for completing SCE	Basis for determination is nee	Pathway priority	Site priority	Status of EPA review of SCE decision	Source control alternatives evaluation and schedule (m-y)	Selected SCMs	Status of EPA review of SCM selection decision	SCM activities completed to date (m-y)	Mass or volume of contaminants controlled	Additional Proposed SCM activities to be done and schedule (m- y)	Date SCM completed (m-y)	Status of EPA review of completed SCM	Operaton and maintenance requirements
Freightliner	2366	8.3 E	6936 N	Mike	PH Agr for RVSCM	RI	06/30/10	Bank Erosion	N/A	N/A	N/A	N/A	level none	level	NIA	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	NA
Freightliner Truck Plant Freightliner Truck Plant	2366	NAME AND ADDRESS OF TAXABLE PARTY.	Fathom 6936 N	Romero Mike Romero	PH Agr for RVSCM	RI	08/30/10	Groundwater	Ongoing	determine nature and extent of VOC plume	4th Qtr 2010	Wating on SCE/RI report to be completed	pLov		Waiting on SCE/RI to be completed.	ATTENDED TO SERVICE		Section 1						TAR TO
Freightliner Truck Plant		3 83E		Mike Romero	PH Agr for RI/SCM (12/02)	RI	06/30/10	Stormwater	Ongoing	SW evaluation started 07	1st Qtr 2011	Wating on SCE to be completed	to be determined	pLow	Waiting on SCE to be completed,		RP voluntarity applying SW engineering controls on Ensign Street Outfall; coating metal roof, stormwater system sediment cleanout 06-07 prior to completing screening							
Freightliner Truck Plant	2366	8.3E	6936 N Fathorn	Mike Romero	PH Agr for RVSCM (12/02)	Ri	06/30/10	Overwater Activities	N/A	N/A	NA	N/A	none		N/A	N/A	N/A	N/A	N/A	NIA	NA	N/A	N/A	N/A
Freightliner Truck Plant	2366	8.3 E	6936 N Fathorn	Mike Romero	PH Agr for RI/SCM (12/02)	RI	08/30/10	Other	NA	NA	NA	N/A	nona		N/A	N/A.	NA	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Lakeskie Industries	2372	2 8.4 W	4850 NW From	Jim Orr	PH Letter Agr for XPA (3/02)	XPA	07/11/10	Overland Transport/Sheet Flow	N/A	NA	N/A	NA	none		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Lakeside Industries	2372	2 8.4 W	4850 NW From	Jim Orr	PH Letter Agr for XPA (3/02)	XPA	07/01/10	Blank Erosion	Ongoing	Prepare SCE report	To be determined	Insignificant pathway, no actions recommended	pLow		Waiting on SCE completion					Mark St.	-			Date of the last
Lakeside Industries	2372	2 6.4 W	4850 NW Fran	Jin Orr	PH Letter Agr for XPA (3/02)	XFA	07/01/10	Groundwater	Ongoing	Prepare SCE report	To be determined	Waiting on SCE to be completed	plew		Waiting on SCE completion		UIC closures in 2003							
Lakeside	2372	2 8.4 W	4850 NW Fron	Jim Orr	PH Letter Agr for XPA (3/02)	хра	07/01/10	Stormwater	Ongoing	Initiate stormwater evaluation	To be determined	Waiting on SCE to be completed	to be determined	pLow	Wating on SCE completion		Interim SCM: stormwater UiCs			MASS		7.1		
Lakeside Industries	1000	1000	4850 NW Fron		PH Letter Agr for XPA (3/02)		07/01/10	Overwater Activities	N/A	N/A	N/A	No known current sources (spills reported to OERS)	-		N/A	N/A	N/A	N/A	N/A	NA	N/A	N/A	N/A	NA
Lakeside Industries	2372	2 5.4 W	/ 4850 NW Fron	Jim Orr	PH Letter Agr for XPA (3/02)	XPA	07/01/10	Other	N/A	NIA	N/A	N/A	none.		N/A	N/A	N/A	NA	NA	NA	NA	N/A	N/A	N/A
Shaver Transportation	2377	7 8.4 W	4900 NW From	Mark Pugh	PH Letter Agr for XPA (3/01)	NFA	03/03/06	Overland Transport/Sheet Flow	Completed			Insignificant pathway, no actions recommended	Low		EPA reviewed and commented, 8/2003		No SCM needed		6688			The same		
Shaver Transportation	2377	7 8.4 W	4900 NW From	Mark Pugh	PH Letter Agr for XPA (3/01)	NFA	03/03/06	Bank Erosion	Completed	(Septime)		Insignificant pathway; no actions recommended	Low		EPA reviewed and commented, 8/200.		No SCM needed							
Shaver Transportation	2377	7 8.4 V	4900 NW From	Mark Pugh	PH Letter Agr for XPA (3/01)	NFA	03/03/06	Groundwater	Completed	10000	1	Insignificant pathway, no actions recommended	Low	Low	EPA reviewed and commented, 8/200		No SCM needed		HAMIN		AND THE	1	No.	
Shaver Transportation	2377	7 8.4 V	4900 NW Fron	Mark Pugh	PH Letter Agr for XPA (3/01)	NFA	03/03/06	Stormwater	Completed	the second		Insignificant pathway, no actions recommended		100	EPA reviewed and commented, 8/200	2	No SCM needed			Like Street		1000	of the state of	
Shaver Transportation	237	7 8.4 V	4900 NW From	Mark Pugh	Did I when Ape for YDS	NEA	03/03/06	Overwater Activities	Completed	TO THE REAL PROPERTY.		Insignificant pathway; no actions recommended			EPA reviewed and commented, 8/200	2	No SCM needed							
Shaver Transportation		7 8.4 V	V 4900 NW From	t Mark Pugh	PH Letter Agr for XPA (3/01)	NFA	03/03/06	Other	N/A	N/A	N/A	N/A	none	145	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Portland Shipyard (Vig Industrial Portland)	or 271	1 8.4 6	Swan Island	Dave Lace	Voluntary Arragment		6/21/2010	Overland Transport/Sheet Flow	To be evaluated by Port of Portland.	N/A	N/A	N/A	N/A		N/A									
Portland Shipyard (Vig Industrial Portland)	or 271	1 8.4 E	Swan Island	Dave Lace	Voluntary Agreement (5/05)	XPA	6/21/2010	Bank Erosion	To be evaluated by Port of Portland.	N/A	N/A	N/A	NA		N/A									
Portland Shipyard (Vig Industrial Portland)		1 8.4 6	Swan Island	Dave Lace	Voluntary Agreement (6/06)	хра	6/21/2010	Groundwater	To be evaluated by Port of Portland.	N/A	N/A	NA	N/A		N/A									
Portland Shipyard (Vig Industrial Portland)	-	1 8.4 6	Swan Island	Dave Lace	Voluntary Agreement (6/06)	XPA	6/21/2010	Stormwater	Ongoing	Draft SCE in review	4th Qtr 2010	Complete	p Med	p Med	Waiting on SCE to be completed.									
Portland Shipyard (Vig Industrial Portland)		1 8.4 5	Swan Island	Dave Lace	Voluntary Agreement (6/06)	XPA	6/21/2010	Overwater Activities	Ongoing	Draft SCE Submitted 4/10 in review	4th Qtr 2010	Wating on SCE to be completed	p Med		Waiting on SCE to be completed.									
Portland Shipyard (Vig Industrial Portland)		1 8.4 8	Swan Island	Dave Lace	Voluntary Agreement (6/06)	XPA	6/21/2010	Other	N/A	N/A	N/A	N/A	NA		N/A									

	Confir	med or	suspected s	ources of	contamination to t	the river				a 000000000000000000000000000000000000														
	Site	infon	mation	1	Projec	t status				Source Cor	ntrol Evalu	uation (SCE)				Source	Control	Decisions	(SCDs) ar	nd Status o	f Source Co	ntrol N	leasures	(SCMs)
Site name	ECSI#	River mile	Address	DEQ PM	Type of agreement directing source control	Project status		SCE Pathway	Status of SCE	Major SCE tasks to be completed	Schedule for completing SCE		Pathway priority	Site priority	Status of EPA review of SCE	Source control alternatives evaluation and schedule (m-y)	Selected SCMs	Status of EPA review of SCM selection decision	SCM activities completed to date (m-y)	Mass or volume of contaminants controlled	Additional Proposed SCM activities to be done and schedule (m-	Date SCM completed (m-y)	Status of EPA review of completed	Operaton and maintenance requirements
Portland Shipyard (Port of Portland)	271	8.4 E	Swan Island	Dave Lacey	Voluntary Agreement (6/06)	RI	12/21/09	Overland Transport/Sheet Flow	Ongoing	OU-1 SCE in prepartaion, OU 2 SCE draft submitted 4/10, OU-3 SCE draft submitted 4/10	4th Qtr 2010	Waiting on SCE to be completed	p Med	level	Weiting on SCE to be completed						Y)		SCM	
Portland Shipyard (Port of Portland)	271	8.4 E	Swan Island	Dave Lacey	Voluntary Agreement (6/06)	RI	12/21/09	Bank Erosion	Ongoing	OU-1 SCE in prepartaion, OU 2 SCE draft submitted 4/10, OU-3 SCE draft submitted 4/10	4th Qtr 2010	Waiting on SCE to be completed	p Med		Waiting on SCE to be completed									
Portland Shipyard (Port of Portland)	271	8.4 E	Swan Island	Dave Lacey	Voluntary Agreement (6/06)	RI	12/21/09	Groundwater	Ongoing	OU-1 SCE in prepartaion, OU 2 SCE draft submitted 4/10, OU-3 SCE draft submitted 4/10	4th Qtr 2010	Waiting on SCE to be completed	p Med	p Med	Waiting on SCE to be completed									
Portland Shipyard (Port of Portland)	271	8.4 E	Swan Island	Dave Lacey	Voluntary Agreement (6/06)	RI	12/21/09	Stormwater	Ongoing	OU-2 SCE draft submitted 4/10, OU-3 SCE draft submitted on 4/10	4th Qtr 2010	Waiting on SCE to be completed	p Med		Waiting on SCE to be completed									
Portland Shipyard (Port of Portland)	271	8.4 E	Swan Island	Dave Lacey	Voluntary Agreement (6/06)	RI	12/21/09	Overwater Activities	Ongoing	N/A	N/A	N/A	N/A		N/A									
M Hood Chemicals	61	8.5 W	4444 NW Yeon	Jim Orr	Agreement for Stormwater Assessment & Source Control	RVSCE	07/29/10	Overland Transport/Sheet Flow	N/A	N/A	N/A	N/A	N/A	N/A	N/A	NIA	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Mt Hood Chemicals	81	8.5W	4444 NW Year	Jim Orr	Agreement for Stormwater Assessment & Source Control	RVSCE	07/29/10	Bank Erosion	N/A	N/A	N/A	N/A	N/A	N/A	NA	N/A	NA	N/A:	N/A	N/A	N/A	N/A	N/A	NA
Mt Hood Chemicals	81	8,5W	4444 NW Yean	Jim Orr	Agreement for Stormwater Assessment & Source Control	RVSCE	07/29/10	Groundwater	Ongoing	Compliance Montering of groundwater and sub-slab vispors. Treatment of groundwater by Hydrogen Release Compound and Vapor extraction.	4th Qtr 2011	Waiting on SCE to be completed	plow	pLow	Wating on SCE to be completed		Operating instu- groundwater VOC treatment HRC and vepor extraction system		Operating insitu groundwater VOC treatment HRC and vapor extraction system December 2010		SCM Complete	December 2010	Schedule for completing final evaluation report.	periodic inspection and maintenance
Mt Hood Chemicals	81	8.5W	4444 NW Yeon	Jim Orr	Agreement for Stormwater Assessment & Source Control	RVSCE	07/29/10	Stormwater	Ongoing	SCE Work Plan and implementation	4th Qtr 2011	Waiting on SCE to be completed	plow	pLow	Waiting on SCE to be completed		a gracini		2010					
Mt Hood Chemicals	81	8.5W	4444 NW Yeon	Jim Orr	Agreement for Stormwater Assessment & Source Control	RVSCE	07/29/10	Overwater Activities	N/A	N/A	N/A	NA.	NA	N/A	N/A	N/A	N/A	N/A	N/A:	N/A	N/A	N/A	N/A	N/A
Mt Hood Chemicals	81	8.5W	4444 NW Yeon		Agreement for Stormwater Assessment & Source Control	RISCE	07/29/10	Other	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
PGE Forest PGE Forest	1000	8.5 W	4400 Block Street 4400 Block	Karen Tamow Karen	1999 ICP Agreement	NFA	07/27/10	Overland Transport/Sheet Flow	Completed	N/A	N/A	N/A	попе	18	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Park PGE Forest	20013	8.5 W	Street 4400 Block	Tamow	1999 ICP Agreement	NFA	07/27/10	Bank Erosion	Completed	N/A	N/A	N/A	none	Towns.	N/A	N/A	N/A	N/A	NIA	N/A	N/A	N/A	N/A	N/A
Park	2400	8.5 W	Street	Tarnow	1999 ICP Agreement	NFA	07/27/10	Groundwater	Completed	N/A	N/A	N/A -	none	PA S	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
PGE Forest Park	2406	8.5 W	4400 Block Street	Karen Tarnow	PPA	SCE	07/27/10	Stormwater	Ongoing	None		Complete	Low	Low	SCD document needs to be prepared by DEQ schedule TBO		PPA with City of Portland requires ongoing erosion control pending site development							
PGE Forest Park	2408	6.5 W	4400 Block Street	Karen Tamow	1999 ICP Agreement	N/A	07/27/10	Overwater Activities	N/A	N/A	N/A	N/A	none		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
PGE Forest Park	2406	8.5 W	4400 Block Street	Karen Tarnow	1999 ICP Agreement	N/A	07/27/10	Other	N/A	N/A	N/A	N/A	none		NA	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Calbag Metals	2454	8.5 W 4	4927 NW Front	Tom Gainer	PH Letter Agr for XPA (1/01)	XPA	03/06/06	Overland Transport/Sheet Flow	N/A	N/A	N/A	N/A	none		N/A	N/A	N/A	N/A	NA	N/A	N/A	N/A	N/A	N/A
Calbag Metals	2454	8.5 W 4	4927 NW Frant	Tom Gainer	PH Letter Agr for XPA (1/01)	XPA	03/06/06	Bank Erosion	N/A	N/A	N/A	N/A	none		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Calbag Metals	2454	85W 4	4927 NW Front	Tom Gainer	PH Letter Agr for XPA (1/01)	XPA	03/06/06	Groundwater	N/A	N/A	N/A	N/A	none		N/A	N/A	N/A	N/A	N/A	N/A	NA	N/A	N/A	NA
Calbag Metals	2454	85W 4	4927 NW Front	Torn Gainer	PH Letter Agr for XPA (1/01)	XPA	08/02/10	Stormwater	Completed			Pathway is complete	Medium	Medium	EPA reviewed and commented on preliminary SCD, 5/2004	alternatives evaluation completed, submitted to EPA 9/2005	stormwater catch basin in-line cleanout, stormwater BMPs, monitoring	SCM SCD fnalized 11/2005, EPA commented	stormwater catch basin in-line cleanout, stormwater BMPs, monitoring		New data resulted in DEQ reopening project and reviewing the adequacy of the 2005 source control action. Re-evaluate stormwater solids fall 2010		EPA reviewed and commented 11/2005	
Calbag Metals	2454	8.5 W 4	4927 NW Front	Tom Gainer	PH Letter Agr for XPA (1/01)	XPA	03/06/06	Overwater Activities	NIA	N/A	N/A	N/A	none		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	2454	8.5W 4	1927 NW Front	Tom Gainer	PH Letter Agr for XPA (1/01)	XPA	03/06/06	Other	N/A	N/A	N/A	N/A	none		N/A	N/A	N/A	N/A	N/A	NA	N/A	N/A	N/A	N/A
Pipeline	2117	O.P. NV	4500 Block Front Ave.	Matt McClincy	PH Agr for RI/SCM (8/00)	RI	08/09/10	Overland Transport/Sheet Flow	N/A	N/A	N/A	N/A	none		N/A	N/A	N/A	N/A	NA	N/A	NA	N/A	NIA	N/A
Product	2117	8.7 W	4500 Block Front Ave.	Matt McClincy	PH Agr for RVSCM (8/00)	Ri	08/09/10	Bank Erosion	N/A	N/A	N/A	NA	none		N/A	N/A	N/A	N/A	N/A	N/A	NVA	N/A	N/A	N/A
Product Pipeline	2117		4500 Block Front Ave.	Matt McClincy	PH Agr for RVSCM (8/00)	RI	08/09/10	Groundwater	Ongoing	Review of Guilds Lake Rail Yard data and Gunderson data	4th quarter 2010	Waiting on SCE to be completed	plow	nla	Waiting for SCE to be completed.			The state of the s						NAME OF THE OWNER, OF THE OWNER, OF THE OWNER, OF THE OWNER, OWNER, OWNER, OWNER, OWNER, OWNER, OWNER, OWNER,

C		ed or s		ources of	contamination to to	he river t status				Source Conf	trol Evalu	ation (SCE)				Source	Control	Decisions	(SCDs) an	d Status o	f Source Cor	ntrol M	easures	(SCMs)
Site name		River mile	Address	DEQ PM	Type of agreement directing source control	Project status	Date last modified (m-d-y)	SCE Pathway	Status of SCE	Major SCE tasks to be completed	Schedule for completing SCE	Basis for determination is nee	ded Pathway	Site priority level	Status of EPA review of SCE decision	Source control alternatives evaluation and schedule (m-y)	Selected SCMs	Status of EPA review of SCM selection decision	SCM activities completed to date (m-y)	Mass or volume of contaminants controlled	Additional Proposed SCM activities to be done and schedule (m- y)	Date SCM completed (m-y)	Status of EPA review of completed SCM	Operaton and maintenance requirements
Texaco Product	2117	8.7 W	4500 Block Front Ave.	Matt McClincy	PH Agr for RVSCM (8/00)	RI	08/09/10	Stormwater	N/A	NA	N/A	N/A	none	-	N/A	N/A	N/A	N/A	N/A	N/A	N/A.	N/A	N/A	N/A
Texaco Product	2117	8.7 W	4500 Block Front Ave.	Mutt McClincy	PH Agr for RI/SCM (8/00)	Ri	08/09/10	Overwater Activities	N/A	N/A	N/A	N/A	none		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Texaco Product Pipeline	2117	8.7 W	4500 Block Front Ave.	Matt McClincy	PH Agr for RVSCM (8/00)	RI	08/09/10	Other	NA	NA	N/A	N/A	none		N/A:	N/A	N/A	N/A	NIA	NA	N/A	N/A	N/A	N/A
Container Recovery	4015	88W 3	3900 NW Yeon	Karen Tamow	Pre-PH VCP Letter Age for RI/FS	conditional NFA 2004	11/04/09	Overland Transport/Sheet Flow	N/A	N/A	N/A	N/A	none		N/A	N/A	N/A	NA	N/A	N/A	N/A	NIA	N/A	N/A
Container Recovery	4015	8.8 W 3	3900 NW Yeon	Karen Tarnow	Pre-PH VCP Letter Agr	conditional NFA 2004	11/04/09	Bank Erosion	N/A	NA	N/A	N/A	none		N/A	N/A	N/A	N/A	NA	NIA	NIA	N/A	N/A	N/A
Container Recovery	4015	8.8 W 3	3900 NW Yeon	Karen Tarnow	Pre-PH VCP Letter Age for RVFS	conditional NFA 2004	11/04/09	Groundwater	Completed	-	and the last	insignificant pathway, no actions recommended	Low	Low	N/A		No SCM needed		No.					
Container Recovery	4015	8.8 W 3	3900 NW Yeon	Karen Tarnow	None	conditional NFA 2004	11/04/09	Stormwater	Deferred	Stormwater characterization	No current schedule	Waiting on SCE to be completed	to be determined		Wating on SCE completion									
Container	4015	88W 3	3900 NW Yeon	Karen	Pre-PH VCP Letter Ag	conditional	11/04/09	Overwater Activities	N/A	N/A	N/A	N/A	nons		N/A	N/A	N/A	N/A	N/A	NA	N/A	N/A	N/A	N/A
Recovery Container Recovery			3900 NW Yeon	Tamow	for RVFS Pre-PH VCP Letter Ag for RVFS	NFA 2004 conditional NFA 2004	11/04/09	Otter	N/A	N/A	N/A	N/A	none		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
ristensen Oil	Berkelson a	8.9 W	3821 NW St Helens	Shawn Rapp	VCP Letter Agr for PA (8/00)		07/27/10	Overland Transport/Sheet Flow	N/A	N/A	N/A	N/A	none		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
ristensen Oil	2426	8.9 W	3821 NW St Helens	Shawn Rapp	VCP Letter Agr for PA (8/00)	XPA	07/27/10	Bank Erosion	N/A	N/A	N/A	N/A	none		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
rislensen Oil	2426	8.9 W	3821 NW St Helens	Shawn Rapp	VCP Letter Agr for PA (8/00)	XPA	07/27/10	Groundwater	Ongoing	Part of Stormwater Assessment	3rd Otr 2011	to be determined	to be determined		Waiting on SCE to be completed;		from groundwater - dual phase extraction							
nristensen Oil	2426	8.9 W	3821 NW St Helens	Shawn Rapp	VCP Letter Agr for PA (8/90)	XPA	07/27/10	Stormwater	Ongoing	Storm water sampling per JSCS and evaluation of groundwater preferential flow to storm sewer	3rd Qtr 2011	Waiting on SCE to be completed	p Med	p Med	Waiting on SCE to be completed;	N/A	Storm water BMPs and filtering catch basin sediment	N/A	N/A	N/A	N/A	N/A	N/A	N/A
nristensen Oil	2426	8.9 W	3821 NW St Helens	Shawn Rapp	VCP Letter Agr for PA (8/00)	XPA	07/27/10	Overwater Activities	N/A	N/A	N/A	N/A	none		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
nristensen Oil	2426	8,9 W	3821 NW St Helens	Shawn Rapp	VCP Letter Agr for PA (8/00)	XPA	07/27/10	Other	N/A	N/A	N/A	N/A	none		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Texaco Terminal	169	5.9 W	3800 NW St Helens	Matt McClincy	PH Agr for RVSCM (8/00)	Ri	08/09/10	Overland Transport/Sheet Flow	N/A	N/A	N/A	NA	nor e		N/A	N/A	N/A	N/A	NA	N/A	N/A	N/A	N/A	NA
Texaco Terminal	159	8.9 W	3800 NW St. Helens	Mett McClincy	PH Agr for RISCM (8/00)	RI	08/09/10	Bank Erosion	NIA	N/A	N/A	NIA	noi-e		N/A	N/A	N/A	N/A	NIA	N/A	N/A	NA	N/A	NA
Textico Terminal	169	89W	3800 NW St Helens	Matt McClincy	PH Agr for RI/SCM (8/00)	RI	08/99/10	Groundwater	Ongoing	2nd Quarter 2011	2nd Quarter 2011	Waiting on SCE to be completed	plaw	plow	Waiting for SCE to be completed.									
Texaço Terminal	169	8.9 W	3800 NW St Helens	Matt McClincy	PH Agr for RVSCM (8/00)	RI	08/09/10	Stormwater	Ongoing	Evaluating groundwater Infitration to storm sewer system	2nd Quarter 2011	Waiting on SCE to be completed	to be determined		Waiting on SCE to be completed		Par 12							
Texaco Terminal	169	8.9W	3800 NW St Helens	Matt McClincy	PH Agr for RVSCM (8/00)	RI	08/09/10	Overwater Activities	N/A	NA	N/A	No known current sources (spills reported to OERS)	none	1	NA	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Texaco Terminal	169	8.9W	3800 NW St Helens	Matt McClincy	PH Agr for RVSCM (8/00)	RI	08/09/10	Other	NA	NIA	N/A	N/A	nose		NA	N/A	N/A	N/A	N/A	N/A	NA	N/A	N/A	N/A
/anwater and Rogers (Univar)	330	9 W	3950 NW Yeo Ave	EPA lead; Holly Arrigoni	RCRA Coreective Action Order	Corrective Measures Implement ation	nemenn	Overland Transport/Sheet Flow	N/A	NA	NA	NA	None		N/A									14
Variwater and Rogers (Univar)	330	9 W	3950 NW Yeo Ave	EPA lead; Holly Arrigoni	RCRA Corrective Action Order	Corrective Measures Implemen	nematto	Bank Erosion	N/A	NA .	NA	NA	None		N/A									
Vanwater and Rogers (Univar)	330	9 W	3950 NW Yeo Ave	EDA lead	RCRA Corrective Action Order	Corrective Measures Implementation	nemerio.	Groundwater	Completed			Groundwater under control		to be determined		Corrective Measures Study Completed 4/21/06	Soil Vapor Extraction and Groundwater Pump and Trea	Completed	Soil Vapor Extraction and Groundwater Pump and Treat	468,000 lbs	Optimization of SVE at Groundwater Extractic Systems/2008 throug 2010	n	EPA notes that the discovery of NAPL warrants a re-evaluation to the remedy- schedule for this is in development	Ongoing maintenance SVE wells, extraction wells and treatment
Vanwater and Rogers (Univar)	330	9 W	3950 NW Yeo Ave	EPA lead; Holly Arrigoni	RCRA Corrective Action Order	Corrective Measures Implement ation	08/05/10	Stormwater	Ongoing	Stormwaer Pathway Evaluation	1st Quarter 2011	Waiting on SCE to be completed			NA.	Planned for 2nd Quarte 2011	er							

			mation	ources of	contamination to t	t status				Source Cor	trol Evalu	ation (SCE				Source	Control	Decisions	(SCDs) ar	nd Status o	f Source Co	ntrol M	easures	(SCMs)
		River			Type of agreement	Project	Date last		Status of	Major SCE tasks to be	Schedule for	Basis for determinati	on that sourceded	e control	Status of EPA	Source control		Status of EPA	SCM activities	Mass or volume of	Additional Proposed		Status of EPA	
Site name	ECSI #	mile	Address	DEQ PM	directing source control	status	modified (m-d-y)	SCE Pathway	SCE	completed	completing SCE	Pathway determination	Pathway priority level	Site priority level	review of SCE	alternatives evaluation and schedule (m-y)	Selected SCMs	review of SCM selection decision	completed to date	contaminants	SCM activities to be done and schedule (m- y)	Date SCM completed (m-y)	review of completed SCM	Operaton and maintenance requirements
anwater and Rogers (Univer)	330	9 W	3950 NW Yeor Ave	EPA lead; Holly Arrigoni	RCRA Corrective Action Order	Corrective Measures Implement ation	08/05/10	Overwater Activities	N/A	NA NA	NA	NA	None		NA									
anwater and Rogers (Univar)	330	9 W	3950 NW Yeon Ave	EPA lead; Holly Arrigoni	RCRA Corrective Action Order	Corrective Measures Implement ation	08/05/10	Other																
Guilds Lake RR Yard	100	9.0 W	3500 NW Year	Jim Orr	PH Agr for RVSCM (12/02)	RI	07/30/10	Overland Transport/Sheet Flow	NA	NA	N/A	N/A	none		NIA	N/A	NA	N/A	N/A	NA	N/A	N/A	N/A	N/A
Guilds Lake RR Yard	100	9.0 W	3500 NW Yeor	Jim Orr	PH Agr for RI/SCM (12/02)	RI	07/30/10	Bank Erosion	N/A	N/A	N/A	N/A	none		N/A	N/A	NA	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Guilds Lake RR Yard	100	90W	3500 NW Year	Jim Orr	PH Agr for RVSCM (12/02)	Ri	07/30/10	Groundwater	Ongoing	GW Investigation ongoing	3rd Qtr 2011	Waiting on SCE to be completed	pLow		Waiting on SCE to be completed									
Guilds Lake RR Yard	100	9.0 W	3500 NW Year	Jim Orr	PH Agr for RVSCM (12/02)	RI	07/30/10	Stormwater	Ongoing	SW Investigation ongoing:	3rd Qtr 2011	Waiting on SCE to be completed	plow	pLow	Waiting on SCE to be completed									
Guilds Lake RR Yard	100	9.0 W	3500 NW Yeon	Jim Orr	PH Agr for RI/SCM (12/02)	RI	07/30/10	Overwater Activities	N/A	N/A	N/A	N/A	none		N/A	N/A	N/A.	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Suilds Lake RR Yard	100	9.0 W	3500 NW Yeon		PH Agr for RVSCM (12/02)	RJ	07/50/10	Other	N/A	N/A	N/A	N/A	none		N/A	NA	N/A	N/A	N/A	NA	N/A	N/A	NA	N/A
Gunderson	1155	90W	4350 SW Front	Shawn Rapp	Pre-PH VCP Formal Agr for RVFS (1994)	RI	08/05/10	Overland Transport/Sheet Flow - Area 1	N/A	N/A, entirely paved and/or developed	N/A	N/A	none		N/A	NA	NIA	N/A	N/A	N/A	N/A	N/A	N/A	NA
Gunderson	1155	9.0 W	4350 SW Front	Shawn Rapp	Pre-PH VCP Formal Agr for RUFS (1994)	RI	06/05/10	Overland Transport/Sheet Flow - Area 2	Ongoing	DEQ review of Focused Area 2 Rt report & source control screening	TBD pending DEQ's review of Focused Area 2 RI report	Pathway is complete	p High		Waiting on SCE to be completed.									
Gunderson	1155	9.0 W	4350 SW Front	Shawn Rapp	Pre-PH VCP Format Agr for RVFS (1994)	RI	08/05/10	Overland Transport/Sheet Flow-	Ongoing	DEQ review of Focused Area 3 Rt report & source control		Pathway is complete	p High		Waiting on SCE completion									
Gunderson	1155	9.0 W	4350 SW Front	Shawn Rapp	Pre-PH VCP Formal Agr for RVFS (1994)	RI	08/05/10	Bank Erosion - Area 1	Ongoing	screening Survey of erodible soils, follow- up sampling	1st Quarter 2011	Waiting on SCE to be completed	pLow		Waiting on SCE completion									
Gunderson	1155	9.0W	4350 SW Front	Shawn Rapp	Pre-PH VCP Formal Age for RVFS (1994)	RI	08/05/10	Bank Erosion - Area 2	Ongoing	Blank characterization needs to be completed.	1st Quarter 2011	Pathway is complete	High			2 FFS's drafted and rejected by DEQ for lack of data, sampling work plans and FFS revisions pending.	sediment/grit		Interim SCM currently includes shrouding work areas during barge weiding & sandblasting.					
Sunderson	1155	80W	4350 SW Front	Shawn Rapp	Pre-PH VCP Formal Agr for RVFS (1994)	Ri	08/05/10	Bank Erosion - Area 3	Ongoing	Bank characterization needs to be completed.	1st Quarter 2011	Pathway is complete	High	High		Gunderson working on Area 3 FFS revisions based on Area 2 FFS comments.	Final SCMs TBD. Interim SCMs being considered include soil excavation, selected area revegetation, and engineered bank							
Sunderson	1155	9.0 W	4350 SW Front	Shawn Rapp	Pre-PH VCP Formal Agr for RVFS (1994)	RI	08/05/10	Overwater Activities -	N/A	N/A	N/A	No known current sources (spills will be	none		N/A	NIA	stabilization. N/A	N/A	NA	N/A	N/A	N/A	N/A	N/A
Sunderson	1155	9.0 W	4350 SW Front	Shawn- Rapp	Pre-PH VCP Formal Agr for RVFS (1994)	Ri	08/05/10	Groundwater - Area 1	Origoing	Complete site wide groundwater screening to update sampling program	1st Qtr 2011	reported to OERS) Groundwater is a complete pathway, VOC plume migrating to/under river.	p Med		EPA comments received 5/03	Alternatives evaluation completed, EPA comments received	Hydraulic containment and source removal using air-	SCD submitted to EPA 2/2003, EPA comments received	P&T and AS/SVE systems installed and operating	~40 lbs. of HVOCs removed as of 7/07	Conduct SCMs effectiveness evaluation(s). Schedule			Quarterly performance monitoring and reportir
Sunderson	1155	9.0 W	4350 SW Front	Shawn Rapp	Pre-PH VCP Formal Agr for RNFS (1994)	RI	08/05/10	Groundwater - Area 2	Ongoing	RI in review, also see comment for Area 1	1st Otr 2011	Waiting on SCE to be completed	to be determined		Wating on SCE to be completed.	5/2003		5/2003			TBO.			

	Confirm	med or	suspected se	ources of	contamination to th	ne river				0	est Frank	-ti (CCE)				Source	Control	Decisions	(SCDs) an	d Status of	f Source Cor	trol M	easures	(SCMs)
			mation		Project					Source Con	troi Evalu					Source	Control	Decisions	(0003) an	u otatao o				(50)
* 100/100 (J. 10 A		River			Type of agreement	Project	Date last		Status of	Major SCE tasks to be	Schedule for	Basis for determination is need	ded		Status of EPA review of SCE	Source control alternatives evaluation	Selected SCMs	Status of EPA review of SCM	SCM activities completed to date	Mass or volume of contaminants	Additional Proposed SCM activities to be done and schedule (m-	Date SCM completed	Status of EPA review of completed	Operaton and maintenance
Site name	ECSI#	mile	Address	DEQ PM	directing source control	status	modified (m-d-y)	SCE Pathway	SCE	completed	completing SCE	Pathway determination	Pathway priority level	Site priority level	decision	and schedule (m-y)		selection decision	(m-y)	controlled	y)	(m-y)	SCM	requirements
Gunderson	1155	9.0 W	4350 SW Front	Shawn Rapp	Pre-PH VCP Formal Agr for RVFS (1994)	RI	08/05/10	Groundwater - Area 3	Ongoing	RI in review, also see comment for Area 1	1st Qtr 2011	Pathway is complete	p Med		Weiling on SCE to be completed									
Gunderson	1155	9.0 W	4350 SW Front	Shawn Rapp	Pre-PH VCP Formal Agr for RIFS (1994)	Ri	08/05/10	Stormwater - Area 1	Ongoing	Review stormwater sampling plan (10/06) and catch basin sediment sampling report	2nd Quarter 2011	Waiting on SCE to be completed	p Med		Waiting on SCE to be completed.		Interim SCMs being evaluated		Current BMPs include catch basin filter inserts & annual clean-out of	The Lates				
Gunderson	1155	90W	4350 SW Front	Shawn Rapp	Pre-PH VCP Formal Agr for RIFS (1994)	Ri	08/05/10	Stormwater - Area 2	Ongoing	(01/08) Upgrade SW system around taunchways - piping and treatment	2nd Quarter 2011	Pathway is complete	p High		Waiting on SCE to be completed.		Interim SCMs in design include, legacy sediment piping cleanouts		Current BMPs include catch basin filter asserts, annual clean-out of catch					
Gunderson	1155	9.0W	4350 SW Front	Shawn Rapp	Pre-PH VCP Formal Agr for RVFS (1994)	Ri	08/05/10	Stormwater - Area 3	Completed.		2nd Quarter 2011	Pathway is complete	High			TBD pending DEQ's review of RI report and 2008/2009 storm water system sampling reports	Final SGMs TBD & Interim SCMs		Current BMPs include catch basin filter inserts, annual clean-out of catch					
Gunderson	1155	9.0 W	4350 SW Front	Shawn	Pre-PH VCP Formal Agr for RVFS (1994)	Ri	08/05/10	Other	N/A	N/A	N/A	NA	none	-	N/A	N/A	N/A	N/A	N/A	NIA	N/A:	N/A	N/A	N/A
Freightliner (Parts Mfg	115	9.2 E	5400 N Basin	Mike Ramero	PH Agr for RVSCM (12/02)	RI	06/30/10	Overland Transport/Sheet Flow	N/A	N/A	N/A	N/A	nona		N/A	N/A	N/A	N/A	N/A	N/A	NA	N/A	N/A	N/A
Plant) Freightliner (Parts Mig Plant)	115	9.2 E	5400 N Basin	Mike Romero	PH Agr for RI/SCM (12/02)	RI	06/30/10	Bank Erosion	N/A	N/A	N/A	N/A	none:		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Freightliner (Parts Mfg Plant)	115	92E	5400 N Basin	Mike Romero	PH Agr for RVSCM (12/02)	RI)	06/30/10	Groundwaler	Ongoing	Review draft Groundwater SCE	1st Oir 2011	te be determined	pLcw											
Freightliner (Parts Mfg Plant)	115	926	5400 N Basin	Mike Romero	PH Agr for RI/SCM (12/02)	R	06/30/10	Stormwater	Ongoing	Additional stormwater sampling needed	1st Qtr 2011	Waiting on SCE to be completed	to be determined	pLow			RP voluntary cleanout of stormwater system prior to completing screening				District Co.			
Freightliner (Parts Mig	115	92E	5400 N Basin	Mike Romero	PH Agr for RI/SCM (12/02)	RI	06/30/10	Overwater Activities	N/A	NA	N/A	N/A	none		N/A	NA	N/A	N/A	NA	N/A	N/A	N/A	N/A	N/A
Plant) Freightliner (Parts Mig	115	9.2 E	5400 N Basin	Mike	PH Agr for RVSCM	RI	06/30/10	Other	N/A:	N/A	N/A	N/A	nore		N/A.	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Plant) Container Managemen		9.3W	2000 NIW St	Jim Orr	Leter Agreement for Stormwater Assessment and Source Control	SCE	07/29/10	Overland Transport/Sheet Flow	N/A	NA	N/A	N/A	N/A		N/A	N/A	N/A	N/A	N/A	N/A	N/A	NA	N/A	N/A
Container Managemen	4784	9.3W	3000 NW St Helens Rd	Jim Orr	5/26/08 Leter Agreement for Stormwater Assessment and Source Control	SCE	07/29/10	Bank Erosion	N/A	N/A	N/A	N/A	N/4		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	NA
Container Managemen	4784	9.3W	3000 NW St Helens Rd	Jim Orr	5/26/08 Leter Agreement for Stormwater Assessment and Source Control	SCE	07/29/10	Groundwater Investigation of Dry Wells Only	Ongoing	Complete characterization	TBD	Waiting on SCE to be completed	p Law	- SALE	Waiting on SCE completion									
Container Managemen	4784	9.3W	3000 NW St Helens Rd	Jim Orr	5/26/08 Leter Agreement for Stormwater Assessment and Source Control	SCE	07/29/10	Stormwater	Ongoing	Complete characterization	TBO	Waiting on SCE to be completed	p Ned	p Med	Waiting on SCE completion									
Container Managemen	4787	9.3W	3000 NW St Helens Rd	Jim Orr	5/26/08 Leter Agreement for Stormwater Assessment and Source Control	SCE	07/29/10	Overwater Activities	N/A	N/A	N/A	N/A	N/A		N/A	N/A	N/A	N/A	N/A	N/A	NA	N/A	N/A	N/A
Container Managemen	4784	9.3W	3000 NW St Helens Rd	Jim Orr	5/26/08 Leter Agreement for Stormwater Assessment and Source Control 5/26/08	SCE	07/29/10	Other	N/A	N/A	No current schedule.	Waiting on SCE to be completed	to be determined	1	Waiting on SCE completion (m-y)	N/A	N/A	NA	N/A	N/A	N/A	N/A	N/A	N/A
Columbia American Plating	29	9.3W	3003 NW 358	Mark Pugh	Consent Judgment	SCE	05/25/10	Overland Transport/Sheet Flow	NA	NA	N/A	N/A	nene		nda	NA	N/A	N/A	N/A	N/A	N/A	N/A	N/A	NA
Columbia American Plating	29	9.3W	3003 NW 358	Mark Pugi	Consent Judgment	SCE	05/25/10	Bank Erosion	N/A	N/A	NIA	N/A	bune		NA	N/A	N/A	N/A	NA	NA	NA	N/A	N/A	N/A
Columbia American Plating	29	9.3W	3003 NW 350 Ave	Mark Pugt	Consent Judgment	SCE	05/25/10	Groundwater	Completed	N/A	N/A	Incomplete pathway	pone	ptow	NA	NA	NA	NIA	NIA	N/A	N/A	N/A	N/A	NA
Columbia American Plating	29	9.3W	3003 NW 350	Mark Pogl	Consent Judgment	SCE	05/25/10	Stormwater	Completed	None	SCE will be submitted with performance monitoring expected 3rd Qtu 2011	Pathway is complete	p.Low		Wating on SCE completion	Wating on SCE completion	Live Cleanout completed and new stormwate system constructed 2010		Line Cleanout completed	3,740 gallons of slanding water and storm line cleanou water removed; 2.5 tons in-line sedimei disposed of as F- fisted waste.	Performance monitoring 4th Oir 2010 - 2nd Oil 2011	TBO	тво	ТВО

			suspected s	ources of	contamination to t	he river t status		-		Source Cor	trol Evalu	uation (SCE)				Source	e Control	Decisions	(SCDe) ar	nd Status o	f Source Co	ntrol M	lanauran	(CCM-)
		Dhar			Type of agreement		Date last					Basis for determination	on that source	e control		130			(CODS) at	iu Giaius 0	Taken need P	THE TOTAL	200 200	(SCIVIS)
Site name	ECSI	River	Address	DEQ PM	directing source control	Project status	modified (m-d-y)	SCE Pathway	Status of SCE	Major SCE tasks to be completed	Schedule for completing SCE	Pathway determination	Pathway priority level	Site priority level	Status of EPA review of SCE decision	Source control alternatives evaluation and schedule (m-y)	n Selected SCMs	Status of EPA review of SCM selection decision	SCM activities completed to date (m-y)	Mass or volume of contaminants controlled	Additional Proposed SCM activities to be done and schedule (m- y)	Date SCM completed (m-y)	Status of EPA review of completed SCM	Operaton and maintenance requirements
Columbia American Plating	29	9.3W	3003 NW 35th Ave	Mark Pugh	Consent Judgment	SCE	05/25/10	Overwater Activities	N/A	NA	N/A	NA	none		NA	NA	N/A	N/A	N/A	N/A	N/A	N/A	N/A	NIA
Columbia American Plating	29	9.3W	3003 NW 35th Ave	Mark Pugh	Consent Judgment	SCE	05/25/10	Other	N/A	NA	N/A	N/A	none		N/A	N/A	N/A	N/A	N/A	N/A	N/A			
Wilhelm Trucking	69	9.3W	3250 and 3074 NW St. Helens Road	Jim Orr	Letter Agreement for Stormwater Assessment and Source Control 5/26/08	SCE	07/29/10	Overland Transport/Sheet Flow	N/A	N/A	N/A	NA	N/A	STIN	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A N/A	N/A	N/A N/A
Wilhelm Trucking	69	9.3W	3250 and 3074 NW St. Helens Road	Jim Orr	Letter Agreement for Stormwater Assessment and Source Control 5/26/08	SCE	07/29/10	Bank Erosion	N/A	N/A	N/A	N/A	none		NIA	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Withelm Trucking	69	9.3W	3251 and 3074 NW St. Helens Road	Jim Orr	Letter Agreement for Stormwater Assessment and Source Control 5/26/08	SCE	07/29/10	Groundwater	N/A	N/A	NA.	NA	none		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Wilhelm Trucking	69	9.3W	3252 and 3074 NW St. Helens Road	Jim Orr	Letter Agreement for Stormwater Assessment and Source Control 5/26/08	SCE	07/29/10	Stormwater	Ongoing	Work plan under review	4th Quarter 2010 est	to be determined	p Med	p Med	Waiting on SCE completion									
Withelm Trucking	69	9.3W	3253 and 3074 NW St. Helens Road	Jim Orr	Letter Agreement for Stormwater Assessment and Source Control 5/26/08	SCE	07/29/10	Overwater Activities	N/A	N/A	NA	N/A	N/A		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Withelm Trucking	69	9.3W	3250 and 3074 NW St. Helens Road	Jim Orr	Letter Agreement for Stormwater Assessment and Source Control 5/25/08	SCE	07/29/10	Other	N/A	N/A	N/A	N/A	N/A		N/A	NA	NA NA	NA .	NA NA	NA .	NA .	NA NA	NA NA	N/A
E Decommis			2727 NW 29th	Tom Gainer	PH Agr for XPA (1/04)	XPA	08/02/10	Overland Transport/Sheet Flow	N/A	N/A	N/A	N/A	none		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
E Decommis sioning	4003	9.5 W	2727 NW 29th	Tom Gainer	PH Agr for XPA (1/04)	XPA	08/02/10	Bank Erosion	N/A	N/A	N/A	N/A	none		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
E Decommis sioning	4003	9.5 W	2727 NW 29th	Tom Gainer	PH Agr for XPA (1/04)	XPA	08/02/10	Groundwater	Ongoing	Review draft SCE	3rd Quarter 2011	N/A	pLow		N/A	N/A	N/A	N/A	N/A.	N/A	N/A	N/A	N/A	N/A
E Decommis- sioning	4003	9.5 W	2727 NW 29th	Tom Gainer	PH Agr for XPA (1/04)	XPA	08/02/10	Stormwater	Completed		2/06 SCE Report submitted	Pathway is complete	Medium	Medium	Done	SCM implementation report summer 2007	Removal of PCB contaminated sediment from onsite catch basins and pipes, new CBs/fitters, new pipes, paving		1st qtr. 2007			11/25/08 Post-SCM monitoring completed	×	Continued BMPs
E Decommis- sioning	4003	9.5 W	2727 NW 29th	Tom Gainer	PH Agr for XPA (1/04)	XPA	08/02/10	Overwater Activities	N/A	N/A	N/A	N/A	none		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Galvanizers Company	1196	9.6 W	2406 NW 30th	Jim Orr	PH Agr for XPA (10/03)	XPA	07/29/10	Overland Transport/Sheet Flow	: N/A	N/A, site located ~4,500 feet from river	N/A	N/A.	none		N/A	N/A	N/A	N/A	N/A:	N/A	N/A	N/A	N/A	N/A
Galvanizers Company	1196	9.6 W	2406 NW 30th	Jim Orr	PH Agr for XPA (10/03)	XPA	07/29/10	Bank Erosion	N/A	N/A, site located ~4,500 feet from river	N/A	N/A	none		N/A	NA	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Galvanizers Company	1196	9.6 W	2406 NW 30th	Jim Orr	PH Agr for XPA (10/03)	XPA	07/29/10	Groundwater	Ongoing	Draft SCE in review	4th Otr 2010	Pathway is complete	p Med		Waiting on SCE to be completed.									
Galvanizers Company	1196	9.6 W 2	2406 NW 30th	Jim Orr	PH Agr for XPA (10/03)	XPA	07/29/10	Stormwater	Ongoing	Draft SCE in review	4th Qtr 2010	Pathway is complete	p Med	p Med	Waiting on SCE to be completed.		Stormwater RX System installed and Operational		Collecting/reusing Main Plant canopy roof run-off in galvanizing process (5/07), repairing/seating pavement in NE plant yard (8/07).		Sealing unused/unecessary connections to City piping (Whiter 2008), site paving and pavement sealing (Summer 2008)	Stormwater RX operating January 2010		Maintenance of Stormwater RX System
Galvanizers Company	1196	9.6 W 2	2406 NW 30th	Jim Orr	PH Agr for XPA (10/03)	XPA	07/29/10	Overwater Activities	N/A	N/A, site located ~4,500 feet from river	N/A	N/A	none		N/A	N/A	N/A	N/A	N/A	N/A	NA	N/A	N/A	N/A
Galvanizers Company	1196	9.6 W 2	2406 NW 30th	Jim Orr	PH Agr for XPA (10/03)	XPA	07/29/10	Other	N/A	N/A	N/A	N/A	none		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Paco Pumps	146	9.5 W 2	2551 NW 30th	Jim Anderson	ICP Agreement (01/03/07)	NFA	01/24/08	Overland Transport/Sheet Flow	N/A	NIA	N/A	N/A	none		N/A	N/A	N/A	NA	N/A	N/A	N/A	N/A	N/A	N/A
aco Pumps	148	9.6 W 2	2551 NW 30th	Jim Anderson	ICP Agreement (01/03/07)	NFA	01/24/08	Bank Erosion	N/A	N/A	N/A	N/A	none	et la	N/A	N/A	N/A	N/A	N/A	NA	N/A	NA	N/A	N/A
aco Pumps	146	9.6 W 2	2551 NW 30th	Jim Anderson	ICP Agreement (01/03/07)	NFA	01/24/08	Groundwater	N/A	N/A	N/A	N/A	none		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
aco Pumps	146	9.6 W 2	2551 NW 30th	Jim Anderson	ICP Agreement (01/03/07)	NFA	01/24/08	Stormwater	Completed	N/A		No current pathway, legacy solids in storm lines to be investigated	Low	Low	Waiting on SCE completion	The Park				AND STATE	THE PARTY	KIL		E SELECT

Site information Project status Source Control Evaluation (SCE)											Source Control Decisions (SCDs) and Status of Source Control Measures (SCMs)													
	Site	inform	nation		Project	status				Ocurce con	TOT EVAIL	Basis for determination	that source	control		NTO 201 POST- 201 P					Additonal Proposed	Date SCM	Status of EPA	Operaton and
ite name	ECSI#	River mile	Address	DEQ PM	Type of agreement directing source control	Project status	Date last modified (m-d-y)	SCE Pathway	Status of SCE	Major SCE tasks to be completed	Schedule for completing SCE	Pathway determination	Pathway priority level	Site priority level	Status of EPA review of SCE decision	Source control alternatives evaluation and schedule (m-y)	Selected SCMs	Status of EPA review of SCM selection decision	SCM activities completed to date (m-y)	Mass or volume of contaminants controlled	SCM activities to be done and schedule (m- y)	completed (m-y)	review of completed SCM	maintenance requirements
co Pumps	146	9.6 W	2551 NW 30th	Jim Anderson	ICP Agreement (01/03/07)	NFA	01/24/08	Overwaler Activities	N/A	N/A	N/A	N/A	none	8/23	N/A	N/A	N/A	N/A	NA	N/A	N/A	N/A	N/A	NA
co Pumps	146	9.6 W	2551 NW 30th	Jim Anderson	ICP Agreement (01/03/07)	NFA	01/24/08	Other	N/A	N/A	N/A	N/A	pone		NIA	N/A	N/A	N/A	NA	N/A	N/A	N/A	N/A	N/A
Port of Portland erminal 2	2769 1	10.0 W 3	3556 NW Front	Tom Gainer	IGA	XPA	02/19/09	Overland Transport/Sheet Flow	N/A	N/A	N/A	NA	none		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Port of Portland erminal 2	2769	10.0 W 3	3556 NW Front	Tom Gainer	IGA	XPA	02/19/09	Bank Erosion	N/A	N/A	N/A	N/A	none		N/A	NA	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Port of Portland erminal 2	2769	10.0 W 3	3556 NW Front	Tom Gainer	IGA	XPA	08/02/10	Groundwater	Ongoing		4th Qtr 2010	Insignificant pathway; no actions recommended	pLow	plow	Waiting on SCE to be completed	E CONTRACTOR						1		
Port of Portland erminal 2	2769	10.0 W	3556 NW Front	Tom Gainer	IGA	XPA	08/02/10	Stormwater	Ongoing	Evaluate stormwater system	4th Qtr 2010	Waiting on SCE to be completed	to be determined		Waiting on SCE to be completed						Time in			
Port of Portland erminal 2	2769	10.0 W	3556 NW Front	Tom Gainer	IGA	ХРА	02/19/09	Overwater Activities	N/A	N/A	N/A	N/A:	none		N/A	N/A	N/A	N/A	N/A:	N/A	N/A	N/A	N/A	NA
Port of Portland erminal 2	2769	10.0 W	3556 NW Front	Tom Gainer	IGA	ХРА	02/19/09	Other	N/A	NA	NA	N/A	none		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
lbag Metals	5059	10.1 W	2495 NW Nicoll St.	Jim Orr	Letter Agreement for Source Control Assessment 2009	SCE	07/28/10	Overland Transport/Sheet Flow	N/A	N/A	N/A	N/A	nona		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
lbag Metals	5059	10.1 W	2495 NW Nicoli St.	Jim Orr	Letter Agreement for Source Control Assessment 2009	SCE	07/28/10	Bank Erosion	N/A	N/A	N/A	N/A	nona		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
ilbag Metals	5059	10.1 W	2495 NW Nicoli St.	Jim Orr	Letter Agreement for Source Control Assessment 2009	SCE	07/28/10	Groundwater	Ongoing	Two quarters of GW monitoring complete. Final report due in October 2019. No significant issues.	December 2010	Pathway is complete	nona		Waiting on SCE completion (m-y)	evaluation to be part of upland FS, schedule for completing draft/final: December 2010	No SCM needed	June 2011 Tenative Date	N/A	N/A	N/A	N/A	Review Pending, SCA not submitted.	no alternatives evaluat needed
albag Metals	5059	10.1 W	2495 NW Nicoli St.	Jim Orr	Letter Agreement for Source Control Assessment 2009	SCE	07/28/10	Stormwater	Ongoing	Pilot study to evaluate surface washing of PCB contamination is complete. Focused Feaseability Study in production. Most likely surface capping and SW treatment.	No current schedule.	Pathway is complete	Medium	Medium	Waiting on SCE completion (m-y)	evaluation to be part or upland FS; schedule for completing draft/final: August 2011	or and concrete	1	stormwater catch basin in-line cleanout, stormwater BMPs, monitoring		ongoing stormwater monitoring through spring 2011	August 2011	Review Pending, SCA not Submitted.	effectiveness monitor
albag Metals	5059	10.1 W	2495 NW Nicoli St.	Jim Orr	Letter Agreement for Source Control Assessment 2009	SCE	07/28/10	Overwater Activities	N/A	N/A	N/A	N/A	none		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
albag Metals	5059	10.1 W	2495 NW Nicoli St.	Jim Orr	Letter Agreement for Source Control Assessment 2009	SCE	07/28/10	Other	N/A	N/A	N/A	N/A	none		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
PRR Albina	178	103E	2745 N Interstate	Mike Romero	PH Agr for RVSCM (3/02)	RI	06/30/10	Overland Transport/Sheet Flow	Submitted	Review document	4th Quarter 2010	SCE complete, DEQ review underway	pLow		Wating on SCE to be completed									
PRR Albina	178	10.3 E	2745 N Interstate	Mike Romero	PH Agr for RI/SCM (3/02)	RI	05/30/10	Bank Erosion	Submitted	Review document	4th Quarter 2010	SCE complete, DEQ review underway	pLow		Walting on SCE to be completed									
PRR Albina	178	10.3 E	2745 N Interstate	Mike Romero	PH Agr for RVSCM (3/02)	RI	06/30/10	Groundwater	under revision	Review document	4th Quarter 2010	SCE complete, DEQ review underway	to be determined	d plow	Wating on SCE to be completed					No.				
JPRR Albina	178	103E	2745 N Interstate	Mike Romero	PH Agr for RVSCM (3/02)	RI	06/30/10	Stormwaler	Submitted	Review document	4th Quarter 2016	SCE complete, DEQ review underway	to be determine	15	Waiting on SCE to be completed	0	RP cleaned ou stormwater system prior to completion of			Salis .	Tours.	I E		
IPRR Albina	178	103E	2745 N Interstate	Mike Romero	PH Agr for RVSCM (3/02)	RI	06/30/10	Overwater Activities	N/A	N/A	N/A	N/A	none		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
JPRR Albina	178	10.3 E	2745 N Interstate	Mike Romero	PH Agr for RI/SCM (3/02)	RI	06/30/10	Other	N/A	N/A	N/A	N/A	none		N/A	N/A	N/A	N/A	NA	N/A	NA	N/A	N/A	NA
Goldendale Aluminum	2440	10.3 E	2600 N River	Tom Gainer	PH Letter Agr for XP (2/00)	A NFA 5/2004	03/06/00	Overland Transport/Sheet Flow	Completed			Insignificant pathway, n actions recommended			EPA reviewed an commented 5/0		No SCM need	ed					N/A	
Goldendale	23/12	1025	2600 N Rive	Tom Gainer	PH Letter Agr for XP (2/00)	A NFA 5/2004	03/06/06	Bank Erosion	N/A	N/A	N/A	N/A	none	70	N/A	N/A	N/A	N/A	NIA	N/A	N/A	N/A	N/A	N/A

			suspected s	ources of	contamination to t	he river t status				Source Cor	trol Evalu	uation (SCE))			Source Control Decisions (SCDs) and Status of Source Control Measures (SCMs)								
Site name	ECSI #	River mile	Address	DEQ PM	Type of agreement directing source control	Project status	Date last modified (m-d-y)	SCE Pathway	Status of SCE	Major SCE tasks to be completed	Schedule for completing SCE	Basis for determination			Status of EPA review of SCE	Source control alternatives evaluation and schedule (m-y)		Status of EPA	SCM activities completed to date (m-y)	Mass or volume of contaminants controlled	Additional Proposed SCM activities to be done and schedule (m- y)	Date SCM	Status of EPA review of completed SCM	Operaton and maintenance requirements
Goldendale Aluminum	2440	10.3 E	2600 N River	Torn Gainer	PH Letter Agr for XPA (2/00)	NFA 5/2004	03/06/06	Groundwater	Completed			Insignificant pathway; no actions recommended		lever	EPA reviewed and commented 5/04		No SCM needed						N/A	
Goldendale Aluminum	2440	10.3 E	2600 N River	Tom Gainer	PH Letter Agr for XPA (2/00)	NFA 5/2004	03/06/06	Stormwater	Completed			Insignificant pathway, no actions recommended	Low	Low	EPA reviewed and sommented 5/04		No SCM needed	Anne Ansan				XI.	N/A	
Goldendale Aluminum	2440	10.3 E	2600 N River	Tom Gainer	PH Letter Agr for XPA (2/00)	NFA 5/2004	03/06/06	Overwater Activities	N/A	N/A	N/A	N/A	none		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Goldendale Aluminum	2440	10.3 E	2600 N River	Tom Galner	PH Letter Agr for XPA (2/00)	NFA 5/2004	03/06/06	Other	N/A	N/A	N/A	N/A	none		N/A	N/A	N/A	N/A	NA	N/A	N/A	N/A	N/A	N/A
PGE Substation E	3976	10.4 W	2635 NW Front Ave.	Torn Gainer	VCP	NFA	12/22/06	Overland Transport/Sheet Flow	N/A	N/A	N/A	N/A	none		NA	N/A	N/A	N/A	NA	N/A	N/A	N/A	N/A	N/A
PGE Substation E	3976	10.4 W	2635 NW Front Ave.	Torn Gainer	VCP	NFA	12/22/06	Bank Erosion	N/A	N/A	N/A	N/A	none	180	N/A	N/A	N/A	N/A	NA	N/A	N/A	N/A	N/A	NA
PGE substation E	3976	10.4 W	2635 NW Front Ave.	Tom Gainer	VCP	NFA	12/22/06	Groundwater	Completed			insignificant pathway, no actions recommended	Low		EPA commended on SCD in 10/06	Source Control Decision and NFA issued 12/6/06								
PGE ubstation E	3976	10.4 W ²	2635 NW Front Ave.	Tom Gainer	VCP	NFA	12/22/06	Stormwater	N/A	N/A	N/A	N/A	none	Low	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
PGE ubstation E	3976	10.4 W ²	2635 NW Front Ave.	Tom Gainer	VCP	NFA	12/22/06	Overwater Activities	N/A	N/A	N/A	N/A	none		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
PGE ubstation E	3976	10.4 W 2	2635 NW Front Ave.	Tom Gainer	VCP	NFA	12/22/06	Other	N/A	N/A	N/A	N/A	none		N/A	NA	N/A	N/A	N/A	N/A	N/A	NA	N/A	N/A
ilzer Pump	1235	10.4 W 2	2800 NW Front	Mark Pugh	Letter Agr for XPA (9/02)	SCE	05/25/10	Overland Transport/Sheet Flow	N/A	Qualitative Assessment	N/A	N/A	none		N/A	N/A	N/A	N/A	N/A	N/A	N/A	NA	N/A	
ilzer Pump	1235	10.4 W 2	2800 NW Front	Mark Pugh	Letter Agr. for XPA (9/02)	SCE	05/25/10	Bank Erosion	Completed	None	Pending completion of storm water evaluation	Waiting on SCE to be completed	p Med		Waiting on SCE to be completed									
itzer Pump	1235	10.4 W 2	2800 NW Front	Mark Pugh	Letter Agr for XPA (9/02)	SCE	05/25/10	Groundwater	Ongoing	Need for additional evaluation and possible sampling	4th Quarter 2010	Waiting on SCE to be completed	p Low		Waiting on SCE to be completed									
lzer Pump	1235	10.4 W 2	800 NW Front	Mark Pugh	Letter Agr for XPA (9/02)	SCE	05/25/10	Stormwater	Ongoing	Complete SCE sampling and reporting	4th Quarter 2010	Walling on SCE to be completed	p Med	p Med	Waiting on SCE to be completed		Storm line and catch basin cleanout		Cleanout completed in Oct 2006	25 tons of studge	twice annual cleaning of catch basins			periodic inspection an maintenance; twice
lzer Pump	1235	10,4 W 21	800 NW Front	Mark Pugh	Letter Agr for XPA (9/02)	SCE	05/25/10	Overwater Activities	N/A	N/A	N/A	No known current sources (spills reported to OERS)	none		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	annual cleanout
	1235	10.4 W 28	800 NW Front	Mark Pugh	Letter Agr for XPA (9/02)	SCE	05/25/10	Other	N/A	N/A	N/A	N/A	none		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Port of Portland erminal t Modh Port of	3377 1	10.6 W 22	200 NW Frunt	Tom Gainer	PH Agr for RVSCM	FS	09/01/10	Overland Transport/Sheet Flow	N/A	N/A	N/A	N/A	none		N/A	NA	NA	N/A	N/A	N/A	N/A	N/A	NA	N/A
Dortland	3377 1	10.6 W 22	200 NW Front	Torn Gainer	PH Agr for RVSCM	FS	09/01/10	Bank Eroslon	N/A	N/A	N/A	N/A	none		N/A	NA	N/A	N/A	N/A	N/A	N/A	N/A	N/A	NIA
Portland erminal 1 North	3377 1	0.6 W 22	200 NW Front	Tom Gainer	PH Agr for RVSCM	FS	09/01/10	Groundwater	Completed			Insignificant pathway, no actions recommended	p Low	plan	Waiting on SWSCE to be completed							S S S		To the second
Port of Portland erminal 1	3377 1	0.6 W 22	200 NW Front	Tom Gainer	PH Agr for RVSCM	RI	09/01/10	Stormwater	Ongoing	Complete stormwater sampling by BES	4th Qtr 2010	Waiting on SCE to be completed	pLow	pLow	Waiting on SCE to be completed		P. Wall	Section 1	1		The second			

_			suspected so	ources of	contamination to t	he river t status		Source Control Evaluation (SCE)									Source Control Decisions (SCDs) and Status of Source Control Measures (SCMs)							
					Type of agreement		Date last		Status of	Major SCE tasks to be	Schedule for	Basis for determination is need			Status of EPA review of SCE	Source control alternatives evaluation	Salarted SCMs	Status of EPA review of SCM	SCM activities completed to date	Mass or volume of contaminants	Additional Proposed SCM activities to be	completed		Operaton and maintenance
ite name	ECSI#	River	Address	DEQ PM	directing source control	Project status	modified (m-d-y)	SCE Pathway	SCE	completed	completing SCE	Pathway determination	Pathway priority level	Site priority level	decision	and schedule (m-y)	Selected Some	selection decision	(m-y)	controlled	done and schedule (m- y)	(m-y)	SCM	requirements
Port of Portland erminal 1	3377	10.6 W	2200 NW Front	Tom Gainer	PH Agr for RUSCM	FS	09/01/10	Overwater Activities	N/A	N/A	N/A	N/A	none		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	NIA
North Port of Portland erminal 1	3377	10.6 W	2200 NW Front	Tom Gainer	PH Agr for RVSCM	FS	09/01/10	Other	N/A	N/A	N/A	N/A	none		N/A	N/A	N/A	NIA	N/A	N/A	N/A	N/A	N/A	N/A
North tiverscape aka Port of irland T1S)	2642	10.9 W	2100 NW Front	Matt. McClincy	RD/RA Agreement (06/06/03)	Conditional NFA 6/2003	03/13/06	Overland Transport/Sheet Flow	Completed			Insignificant pathway, no actions recommended	Low		EPA did not review SCD since site was outside PH		Soil removal and management plan during development, Deed restrictions						EPA did not review SCD since site was outside PH	
Riverscape aka Port of ortland T1S)	2642	10.9 W	2100 NW Front	Matt McClincy	RD/RA Agreement (06/06/03)	Conditional NFA 6/2003	03/13/06	Bank Erosion	Completed			insignificant pathway, no actions recommended	Low		EPA did not review SCD since site was outside PH		No SCM needed						EPA did not review SCD since site was outside PH EPA did not	
Elverscape aka Port of ortland T1S)	2642	10.9 W	2100 NW Front	Matt McClincy	RD/RA Agreement (06/06/03)	Conditional NFA 6/2003	03/13/06	Groundwater	Completed			Insignificant pathway; no actions recommended	Low	Low	EPA did not review SCD since site was outside PH		No SCM needer						review SCD since site was outside PH EPA did not	a guest
Riverscape aka Port of ortland T1S)	2842	10.9 W	2100 NW Front	Matt McClincy	RD/RA Agreement (06/06/03)	Conditional NFA 6/2003	03/13/06	Stormwater	Completed	AT THE		Insignificant pathway, no actions recommended	Low		EPA did not review SCD since site was outside PH		No SCM neede	1					review SCD since site was outside PH EPA did not	
Riverscape aka Port of ortland T1S	2642	10.9 W	2100 NW Front	Matt McClincy	RO/RA Agreement (06/06/03)	Conditional NFA 6/2003	03/13/06	Overwater Activities	Completed			insignificant pathway, no actions recommended	Low		EPA did not review SCD since site was outside PH		No SCM neede	d					review SCO since site was outside PH	
Riverscape aka Port of ortland T15	2642	10.9 W	2100 NW From	Matt McClincy	RD/RA Agreement (06/06/03)	Conditional NFA 6/2003	03/13/06	Other	N/A	NA	N/A	N/A	none		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Pacificorp	5117	11.6 E	Multiple sites in Albina Rivertots area	Dan Haffey	PH Agr for RI/SCM	XPA	07/27/10	Overland Transport/Sheet Flow	N/A	N/A	N/A	N/A	none											
Pacificorp	5117	11.6 E	Multiple sites in	Dan Haffey	PH Agr for RVSCM	ХРА	07/27/10	Bank Erosion	N/A	NA	N/A	N/A	none									-		
Pacificorp	5117	11.6 E	Multiple sites in Albina Riveriot:	Dan Haffey	PH Agr for RVSCM	XPA	07/27/10	Groundwater	Ongoing	PA in progress	4th quarter 2010	Waiting on SCE to be completed	p Low											
Pacificorp	5117	11.6 E	Multiple sites in Albina Riverlots area	Dan Haffey	PH Agr for RVSCM	XPA	07/27/10	Stormwater	Ongoing	Soil abatement and stormwater monitoiring	1st Qtr 2011	Waiting on SCE to be completed	p Med				Selected soil removals in progress							
Pacificorp	5117	11.6 E	Multiple sites in	Dan Hafley	PH Agr for RI/SCM	XPA	07/27/10	Overwater Activities	N/A	N/A	N/A	N/A	none											

DEQ Milestone Report Information about the Source Control Table

Use Of This Sheet

This spreadsheet is intended to track and share information regarding the status of current and potential future upland source control measures. Information is logged by the status of the evaluation in each pathway. The following pathways are included: overland transport, back erosion, groundwater, stormwater, overwater activities, and other (see definitions below). Site included in this spreadsheet are currently being investigated under DEQ oversight or a recent source control decision made for the facility. For more information on these sites please visit DEQ's Environment Cleanup System Information (ECSI) database at http://www.deq.state.or.us/wmc/ECSI/ecsiquery.htm

Definitions

Potential contaminant migration pathways

Overland Transport = Uncontrolled sheet flow of water and other material to the river from a site.

Bank Erosion = Erosion of material within the sloping bank areas of the site to the river.

Groundwater = Groundwater plumes or discharges to the river either via seeps or through preferential pathways.

Stormwater = Stormwater discharges to the River that originates from a pipe (permitted or unpermitted).

Overwater Activities = The storage or use of hazardous substances over the water (i.e., storage tanks on docks, permanent work activities conducted over water), that if released would be a ptotential current or future source of contamination to the river. Pipelines and other conveyance systems are not considered in this category. Releases from these types of systems need to be reported to the state Oregon Emergency Response System (OERS) system.

Other = Pathway examples: wastewater discharges, air deposition, direct discharges.

Priority levels for pathways and sites

High = High priority pathways and sites are those where a complete contaminant migration pathway exists and the upland source is significantly impacting the river or poses a significant and imminent threat to the river based on initial evaluation of key source control prioritization factors (listed on p. 4-3 JSCS). A primary consideration is that one or more media (soil, water, air) significantly exceed applicable Screening Level Values (SLVs) at the point of discharge to the river (e.g., water at the end of a discharge pipe, or soil or material at the riverbank) or the most reliable and cost-effective data point (e.g., groundwater measured at the shoreline), or where a bioaccumulative chemical is detected at concentrations significantly above the SLV. In addition, if an upland source is violating DEQ narrative water quality criteria for the Willamette River, the site may be considered a high priority. High priority sites are expected to move forward with aggressive source control measures without delay or be subject to enforcement action.

Medium = Medium priority pathways and sites are those where a complete contaminant migration pathway exists and the upland source is impacting the river or poses a significant and/or imminent threat to the river based on an initial evaluation of key source control prioritization factors (listed on p. 4-3 JSCS). A primary consideration is that one or more media exceed applicable SLVs, but not significantly, at the point of discharge to the river, or where a bioaccumulative chemical is detected at concentrations above the SLV. Although exceedance of SLVs does not necessarily indicate a site poses a significant and/or imminent threat or needs to immediately implement source control measures, it does indicate that the site may pose a threat to human health or the environment and that additional evaluation may be needed to determine if source control measures are required to prevent, minimize or mitigate the migration of hazardous substances to the river. If the site exceeds one or more SLVs, the need for further characterization or for implementation of source control measures will be based on a site-specific weight-of-evidence determination. Medium priority sites are expected to perform a weight-of-evidence evaluation to determine if source control measures are required.

Low = Low priority pathways and sites are those where upland data indicate, based on an initial evaluation of key source control prioritization factors (listed on p. 4-3 JSCS), that the site likely poses a low threat to the river (e.g., concentrations are near or below SLVs) or where DEQ, in consultation with EPA, may issue an upland "No Further Action" (NFA) determination or lower the State's priority of the site for further upland investigation or remedial action under DEQ's cleanup authority. Source control measures will not be required at low priority sites unless determined necessary by the results of the Portland Harbor RIFS or ROD.

p High = DEQ's preliminary determination is that this is likely a high priority pathway or site based on available information; pending formal source control evaluation determination.

p Med = DEQ's preliminary determination is that this is likely a medium priority pathway or site based on available information; pending formal source control evaluation determination.

p Low = DEQ's preliminary determination is that this is likely a low priority pathway or site based on available information; pending formal source control evaluation determination.

Shading

= Upland Source Control Decision has been completed for the specified pathway at this site.

DEQ Milestone Report Information about the Source Control Table

Pick Lists

Pick lists are used to faciliate the addition of information to the spreadsheet. A pick list is a list that can be used by the project manager to select an entry from a group of designated choices. Pick lists will appear as a pull down menus in the lower right corner for the following fields: Project status, Status of SCE, Schedule for Completing SCE, Completeness of pathway to the river, Pathway priority level, Site priority level, Source control alternatives evaluation and schedule, Selected SCMs, Mass or volume of contaminants controlled, and Operation and maintenance requirements. The pick lists for these fields are shown below.

Project Status
PA
XPA
RI
FS
RD / RA
NFA
PPA
CNFA

Status of SC	E
Ongoing	
Not Started	
Pending EPA	۱
Review	
Completed	
N/A	

Schedule for
completing SCE
No current schedule.
SOW under
development, due (type
SOW currently being implemented.
(PM description of schedule)
N/A

Pathway determination		Al
Pathway is complete Insignificant pathway; no	·	sch
actions recommended		dra
Waiting on SCE to be completed		fin
No known current sources (spills will be reported to OERS)		upla cc
PM description of source		alt

-
Alternatives evaluation
and schedule
no alternatives
evaluation needed
schedule for completing
draft evaluation report:
schedule for completing
final evaluation report:
(m/y) evaluation to be part or
evaluation to be part or
upland FS; schedule for
completing draft/final:
(m/y)
alternatives evaluation
completed (m/y)

Priority level
Llimb
High
Medium
Low
p High
p Med
p Low
to be determined
none (use if SCE determined the

pathway to be incomplete)

S	Status of EPA "Partners" Review of SCA Decision
	EPA reviewed and commented.
F	Review Pending. SCA submitted (type date).
	SCA to be submitted on (type date).
	Public Comment period (type date) to (type date).
٤	SCA submitted to EPA (type date). No comments.
	N/A

Status of EPA review of SCE decision
Review pending; SCE submitted (m-y)
Waiting on SCE completion (m-y)
SCE to be submitted to EPA on (m-y)
To be determined
SCE submitted to EPA (m-y); no comments
N/A

1 1 1 1 1 1 1
Selected SCMs
No SCM needed
(PM description of
SCMs)
N/A
Operation and

and pathway)

N/A (use when the pathway does not exist at the site)

- P
Maintenance
requirements
periodic inspection
and maintenance
effectiveness
monitoring
site use restrictions
(PM description of
operation/maintena
nce requirements)
none

Mass/Volume of contaminants controlled cubic yards of soil removed square feet of area capped linear feet of plume controlled at riverbank linear feet of nverbank stabilized gallons of product recovered (PM description of mass/volume/area controlled)

DEQ Milestone Report Information about the Source Control Table

Acronyms & Abbreviations

×	Apprev	ations
	Agr	Agreement
	AOC	Administrative Order on Consent
	AS/SVE	
	AST	Above ground Storage Tank
	BMPs	Best Management Practices
	BRA	Baseline Risk Assessment
	CNFA	Conditional No Further Action
	ECSI	Environmental Cleanup Site Information
	FS	Feasibility Study
	GW .	Groundwater
	IGA	Inter-Governmental Agreement
	JSCS	Joint Source Control Strategy
	NA	Not Applicable
	NFA	No Further Action
	OF	Outfall
	p&t	Pump & Treat
	PA	Preliminary Assessment
	PH	Portland Harbor
	PH Agr	Portland Harbor Agreement - a formal agreement for a RI and SC
		Agr Portland Harbor Letter Agreement - an initial contract covering DEQ oversight costs
		and limited investigation and cleanup activities
	PM	Project Manager
	PPA	Prospective Purchaser Agreement
	RD/RA	Remedial Design/Remedial Action
	RI	Remedial Investigation
	RI/FS	Remedial Investigation/Feasibility Study
	SC	Source Control
	SCD	Source Control Decision
	SCM	Source Control Measure
	SLV	Screening Level Value
	sow	Scope of Work
	SVE	Soil Vapor Extraction
	TCA	Trichloroethane
	UST	Underground Storage Tank
	1410	3.6.7 (42)

XPA Expanded Preliminary Assessment DEQ Project Managers' Phone Numbers

WO

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Dana Bayuk	(503) 229-5543
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Shawn Rapp	(503) 229-5614
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Dave Lacey	(503) 229-5354
Mike Romero	(503) 229-5563
Jennifer Sutter	(503) 229-6148
Karen Tarnow	(503) 229-6843
Jim Orr	(503) 229-5039
Scott Manzano	(503) 229-6748

Waiting on

Site Location Key

Link to map of sites:

http://www.deq.state.or.us/iq/cu/nwr/PortlandHarbor/docs/PortlandHarborMap.pdf

Site Name	AKA - alternate site names	ECSI # (primary)	ECSI# (secondary)	River Mile	Address
Wilhelm Trucking		69		9.3	3250 and 3074 NW St. Helens Road
McCall Oil		134		7.8	5550 NW Front
NW Pipe Company		138		3.9	12005 N Burgard
ACF Industries	American Car Foundry, EMC Industries - ACF Car, Pacific Metal Substations, Inc., Richmond Tank Car and Manufacturing Co	794		3.6	12160 NW St Helens
Air Liquide	Schnitzer Investment - Doane Lake	395		7.2	6529 NW Front Ave.
Anderson Brothers		970		8.9	5275 & 5315 NW St. Helens Road
Atofina	Arkema, Elf Atochem North America, Pennwalt Chemical Corp.	398		7.2	6400 NW Front
Galvanizers Company	- COID.	1196		9.6	2406 NW 30th Ave.
BP Terminal 22T	ARCO, ARCO Linnton Terminal, BP Atlantic Richfield Company	1528	2373, 2351	4.8	9930 NW St Helens
Brix Maritime	Foss Maritime Co., Knappton Corp.	2364		5,5	9030 NW St Helens
Schnitzer Burgard Industral Park		5324		3.8	12005 N Burgard
Schnitzer Steel	Schnitzer Burgard Industral Park	2355		4	12005 N Burgard
Lakeside Industries		2372		8,4	4850 NW Front Ave.
Calbag Metals	ACME Trading and Supply	2454	2425	8.5	4927 NW Front
Chevron Asphalt Christensen Oil	HAJ, Incorporated	1281		8	5501 NW Front
City of Portland Outfalls	HAJ, Incorporated	2426 2425	-	8.9 3.5 to 9.2	3821 NW St Helens various
Columbia American Plating	1	29	-	9.3	3003 NW 35th Ave.
Con-Metco		3295		2.8	3940 N Rivergate
Container Management					3000 NW Saint Helens
		4784		9.3	Rd.
Container Recovery	Calumbia Farra 9 Marchia	4015		8.8	3900 NW Yeon
Crawford Street Corp	Columbia Forge & Machine Works, Lampros Steel - 8524 N Crawford, TLS Steel - 8514	0000			
Esco Landfill	N Crawford	2363_		6.3	84248 N Crawford 14444 NW Gilliam Loop
	Execution II Dully Dis-	4409		NA	Rd.
Exxon Mobil	ExxonMobil Bulk Plant, ExxonMobil Terminal, Mobil NuStar Oil Bulk Plant - St. Helens RD, Shore Terminals, ST Sentices Olympic Pineline	137		5.1	9420 NW St Helens
Fred Devine	Pacific Coast Environmental, The Marine Salvage Consortium Inc	2365		8.3	6211 N Ensign
reightliner (Parts Manufacturing	a.k.a. Freightliner Truck				
Plant) Freightliner (Truck Plant)	Manufacturing Plant II	115 2366		9.2 8.3	5400 N Basin

Site Location Key

Link to map of sites:

http://www.deq.state.or.us/lq/cu/nwr/PortlandHarbor/docs/PortlandHarborMap.pdf

Site Name	AKA - alternate site names	ECSI# (primary)	ECSI # (secondary)	River Mile	Address
Front Ave LP	CMI Northwest, Hampton Lumber Sales, Glacier NW (former Lone Star), Tube Forgings of America	1239	2378	8.2	4950, 5034 & 5200 NW Front
Galvanizers Company	Fordings of America	1196	2425	9.6	2406 NW 30th Ave.
Gasco	NW Natural, Koppers Co Portland, Pacific Northern Oil Co	84	183	6.4	7900 NW St Helens
Gasco/Siltronic Corp.	Siltronic Corporation, Walker	402			7700 101 5
GE Decommissioning	Siltronic	183 4003	84 2425	6,6 9,5	7700 NW Front 2727 NW 29th Ave.
Georgia Pacific Linnton	Georgia-Pacific / Western Wood Prods Manuf Divn, Georgia-Pacific West, Morge Bros	2370		3.5	12222 NW Marina
Goldendale Aluminum	Ash Grove Cement, Columbia Aluminum, Martin Marietta, Golden NW Aluminum	. 2440		10.3	2600 N River
Gould Electronics	NL Industries	49		7.5	5909 NW 61st Ave.
GS Roofing	Bird & Son, Certainteed Corporation, Fibreboard Corporation	117		7.5	6350 NW Front
Guilds Lake RR Yard	Burlington Northern Santa Fe Railroad Lake Yard, Guilds Lake Railyard, Kleen Blast Abrasives, Lake Yard, Portland Terminal Railroad Guilds Lake Yard	100		9	3500 NW Yeon
Gunderson		1155	2372, 2425	9.0	4350 SW Front
Mt. Hood Chemical	Former Chemical Warehouse	81		8.5	4444 NW Yeon
Jefferson Smurfit	Burgard Industrial Park	2371	<u> </u>	3.7	9930 N Burgard
Kinder Morgan	GATX, GATX Linnton Terminal, GATX St. Helens Road Facility	1096		4.2	11400 NW St Helens
Lakeside Industries		2372	1155	8.4	4850 NW Front
Linnton Oil Fire Training Grounds		1189	-	3.6	NW Marina Way
Linnton Plywood Mar Com Marine (N Parcel)	L & S Marine, Mar Com Marine Ways, Marine Machine Works (Former), Nichols Marine Ways Inc., Riverside Lumber Co.	2373		5.6	8790 N Burgard
Mar Com (S Parcel)	St. Johns Langley LLP, Brix (current owner), L & S Marine, Mar Com Marine Ways (former owner), Marine Machine Works (Former), Nichols Marine Ways Inc., Riverside Lumber Co.	2350		5.8	8790 N Burgard
Marine Finance	Hendren Tow Boat, REH Inc., Riverside Industrial Park, Advanced American	2352		5.8	8444 NW St Helens
McCall Oil	Great Western Chemical, Quadra Chemicals	134		7.8	5550 NW Front
McCormick & Baxter		74		7	6900 N. Edgewater Street
NW Pipe	Northwest Pipe Company	138		3.9	12005 N Burgard
Oregon Steel Mills	Gilmore Steel Corp Rivergate	141		2.2	14400 N Rivergate
Owens-Corning Fiberglass	Trumbull Asp, Kingsley Park, Linnton Planing Mill, Paramount Petroleum Site	1036		3.8	11444 NW St Helens
Pacificorp		5517		11.6	various

Site Location Key

Link to map of sites:

http://www.deq.state.or.us/lq/cu/nwr/PortlandHarbor/docs/PortlandHarborMap.pdf

Site Name	AKA - alternate site names	ECSI # (primary)	ECSI # (secondary)	River Mile	Address
Paco Pumps		146		9.6	2551 NW 30th
PGE Harborton		2353		3,2	NW Marina Way
PGE Forest Park		2406		8.5	4400 Block NW St. Helens Road
PGE Station E		3976		10.4	2635 NW Front Ave.
Port of Portland Auto Storage Area (ASA)	Toyota	2642		5.0	10400 Lombard
Portland Shipyard	Cascade General, Swan Island Upland Facility, North Channel Ave Fabrication, Berth 311	271		8.4	Swan Island
Premier Edible Oils	C & T Quincy Foods (SEE ECSI 2355), Schnitzer Investment Corp.	2013	2355	3.6	10400 N Burgard
Rhone Poulenc	East Doane Lake, Aventis Crop Science, Rhone Poulenc Agricultural Company	155		7	6200 NW St Helens
Riverscape	Port of Portland T1S	2642		10.9	2100 NW Front
Schnitzer Steel	Schnitzer Steel Part of Industrial Park DEQ Site	2355		3.8	12005 N Burgard
Schnitzer Burgard	International Terminals, North Burgard Industrial Park	5324		3.8	12005 N Burgard
Schnitzer Kittridge	Asset Recovery, Schnitzer Investment Corp	2442		8.3	4959 NW Front
Shaver Transportation		2377		8.4	4900 NW Front

Site Location Key

Link to map of sites:

http://www.deq.state.or.us/lq/cu/nwr/PortlandHarbor/docs/PortlandHarborMap.pdf

Site Name	AKA - alternate site names	ECSI # (primary)	ECSI # (secondary)	River Mile	Address
Siltronic Corp. TCE Investigation	Siltronic Corporation, Walker Siltronic	183		6.5	7200 NW Front
Sulzer Pump	Bingham International, Bingham Willamette, Sulzer Pumps, Inc.	1235		10.4	2800 NW Front
Terminal 1 North	BES- Nicolai Shaff	3377		10.6	2200 NW Front
Terminal 2		2769		10	3556 NW Front
Terminal 4 Slip 1	IRM, Cargill	2356		4.3	11040 N Lombard
Port of Portland - Terminal 4 Slip 3	Hall-Buck Marine Inc., Oregon Terminal Company (OTC), OTC Gearlock Maintenance Facility (Former), Quaker State Oil Co., UPRR - Product Transfer Pipeline (Former)	272		4.6	10400 Lombard
Terminal 5	Oregon Steel Mills Slag Pile, Port of Portland - Terminal 5, Blue Lagoon	1686		1.5	15540, 15550, & 15560 N Lombard
TexacoTerminal	Equilon, Shell, Texaco Product Pipeline	169	2117	8.7	3800 NW St Helens
Time Oil (Northwest Terminal)	Bell Terminal North Portland Yard, Riedel	170		3.4	10350 Time Oil Rd
Triangle Park (N PDX Yard)	Environmental Services - N Portland Yard, Sakrete of the Pacific Northwest, Inc., Western Pacific Dredging/Drilling/Piledriving/e tc., Willamette-Western Company, World Security	277		7.5	5828 N Van Houten
UPRR Albina	Albina Rail Yard, Union Pacific RR - Albina Yard	178		10.3	2745 N Interstate
UPRR St Johns Tank Farm	Union Pacific RR - St. Johns Tank Farm, UPRR - Product Transfer Pipeline (Former), UPRR Fuel Loading Facility (Former), Port of Portland Terminal 4 Slin3	2017		4.6	6908 N Roberts
USCG	US Coast Guard - Portland Station	1338		8.2	6767 N Basin Ave.
US Moorings		1641		6.2	8010 NW St. Helens Rd.
Willamette Cove		2066		6.8	Foot of N Edgewater
Willbridge	Kinder Morgan, Chevron, ConocoPhillips, GATX - Willbridge Terminal, Tosco - Willbridge Terminal, Unocal - Willbridge Terminal	1549	·	7.7	Front Ave & NW Doane
Vanwater and Rogers	Univar	330		9	3950 NW Yeon Ave.
Willamette Cove		2066		6.8	Foot of N Edgewater
Calbag Metals		5059	<u> </u>	10.1	2495 Nicholai St.
US Navy Reserve		5109		8.2	6735 North Basin Avenue
Shore Terminals		5130		5.4	9400 NW Saint Helens Rd.

Status of High Priority Sites

		r	High Priority	Source Control	Palastin of		
	Site	River Mile		Evaluation	Selection of Source Control Measure	Implementation of Source Control Measure	Remarks
1	Oregon Steel	2.2E	Bank erosion	Complete	-Currently considering re-design incorporating bioengineering based largely on satisfying ESA concerns	-Summer 2011 or 2012	
	Mills		Stormwater	Complete	-Complete	-End-of-pipe treatment system operating since summer '07System expanded in 2008Loading evaluation to be conducted in 2010-11 water year.	ear.
2	City Stormwater Outfalls	Various	Stormwater .	Ongoing	-SCMs being selected at individual upland sites	-SCMs being implemented at individual upland sites -Treatment at end of 3 OF basin in '95-'96 -Partial/complete diversion of stormwater to WWTP/POTW in 15 basins (work to be completed by 2011) -Ongoing City-wide programmat source control efforts (see Section 2.1)	identify up-pipe sources
3	Premier Edible Oil	3.6E	Groundwater	Ongoing (to be determined)	-DEQ is requring a focused feasibility study (FFS) to be performed to support selection of SCM addressing NAPL and groundwater		-Outstanding nature and extent issues (i.e., SCE) to be addressed in FFS
4	Schnitzer Burgard Industrial Park	3.8E	Stormwater Overland	Ongoing (TBD) Ongoing	The ground water		-SCE complicated by property ownership
			Transport	(TBD)			-SCE complicated by property ownership
5	Schnitzer Steel	4.0E	Stormwater Overland Transport	Ongoing (4th Qtr '11) Ongoing (4th Qtr '11)	-Stormwater capture, re-use, end-of-pipe treatment sytem installed in 2009 -Asphalt berm constructed in 2009 along 925' of landward edge of Schnitzer dock to help		-Stormwater management system to be expanded
6	Kinder Morgan (former GATX)	4.2W	Groundwater	Ongoing (1st Qtr '11)	prevent overland runoff to slip -GW pump & treat system in-place -SCE designed to enhance existing interim -GW CSM		
7	BP/Arco	4.8W	Groundwater	Complete	-FFS for barrier wall being prepared -Barrier wall & enhanced GW pump & treat system in-place -Riverbank & nearshore sediment removal - completed fall '08	-RP started SCM in summer '07 Fish Window & completed work in fall '08 removing 16,000cy of contaminated soil/sediment.	
8	Exxon/Mobil	5.1W	Groundwater	Complete	Complete	Complete	-SCM selected in 1997 DEC ROD. Onging SCM. -Further SCMs (enhancement
9	MarCom South	5.8E	Overland Transport	Currently reviewing revised SCE	·	-	are being studied -RP removed sand blast grit pites in fall '08 as part of "housekeeping" effort
10	Gasco	6.4W	Groundwater	Complete	-SCM Eval report (FFS) submitted 10/07 -Draft interim Design Report submitted 11/09 -Currently in Formal Dispute Resolution regarding next step in SCMs		-See Section 5.0 of text
			Bank erosion	Complete	-Coordinate with in-water Early Action		In-water Early Action AOC v EPA signed 9/09
11	Gasco (Siltronic)	6.6W	Groundwater	-SCE received '09, preliminarily reviewed & deferred	-SCE FFS for Gasco considers this pathway		-Gasco MGP waste on the Siltronic property
12	Siltronic	6.5W	Groundwater	Complete	-SCM Eval report (FFS) submitted 10/07 -Enhanced in-site bioremediation (EIB) SCM applied fall '08EIB supplemental work in '09 & '10	-EIB also applied in source area -SCM effectiveness monitoring ongoing	
13	Rhone Poulenc		Groundwater	Ongoing (4th Qtr '10)	-RP recently completed long-term pilot testing for potential pump & treat SCM.	ongonig	-Comprehensive SCE Report due October 2010
14	Arkema	7.2W	Groundwater	Complete	-Revised FFS for barrier wall & hydraulic received 2008. -DEQ selected wall/extraction well SCM in 200	Arkema submitted a draft design for the well/wall SCM in 2010. DEQ provided comments. -Well/wall SCM is in final design -SCM scheduled to begin 2011	
		Į	Stormwater Bank erosion	Complete Complete	-Stormwater SCM in design & permitting	SCM construction scheduled to begin 2011.	To be integgrated into in-
15	Willbridge		Groundwater	Complete (except for	Complete	Complete	water Early Action Ongoing GW pump & Ireat SCMs Further SCM ehancements
16	Gunderson	9,0W	Groundwater	deep GW) Ongoing (1st Qtr '11)			are being studied Ongoing GW pump & treat SCM in Area 1
			Stormwater	Ongoing (2nd Qtr '11)			
			Bank erosion	Ongoing (1st Qtr '11)			
			Overland runoff	-TDB, pending DEQ review of RI Report			

Notes: 1) Date in parentheses is expected date of completion 2) Source Control Evalaution (SCE)

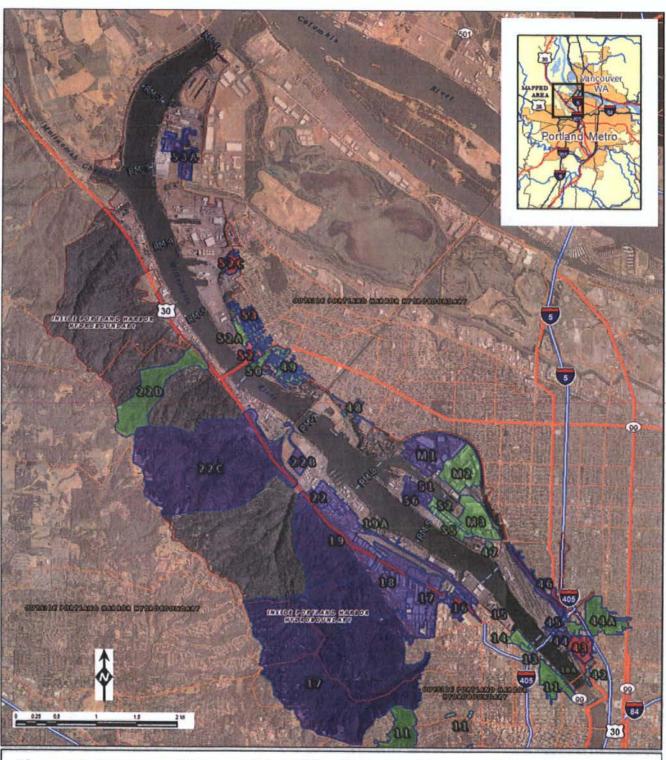


Figure 1: Status of Source Identification in City Stormwater Basins
(August 2010)

Este imagery 2009 from UDSA NAIP photography.

Outfalls, outfall basins, and hydre boundary from City of Portland Eureau of Environmental Services
Takets from Matro 8115.

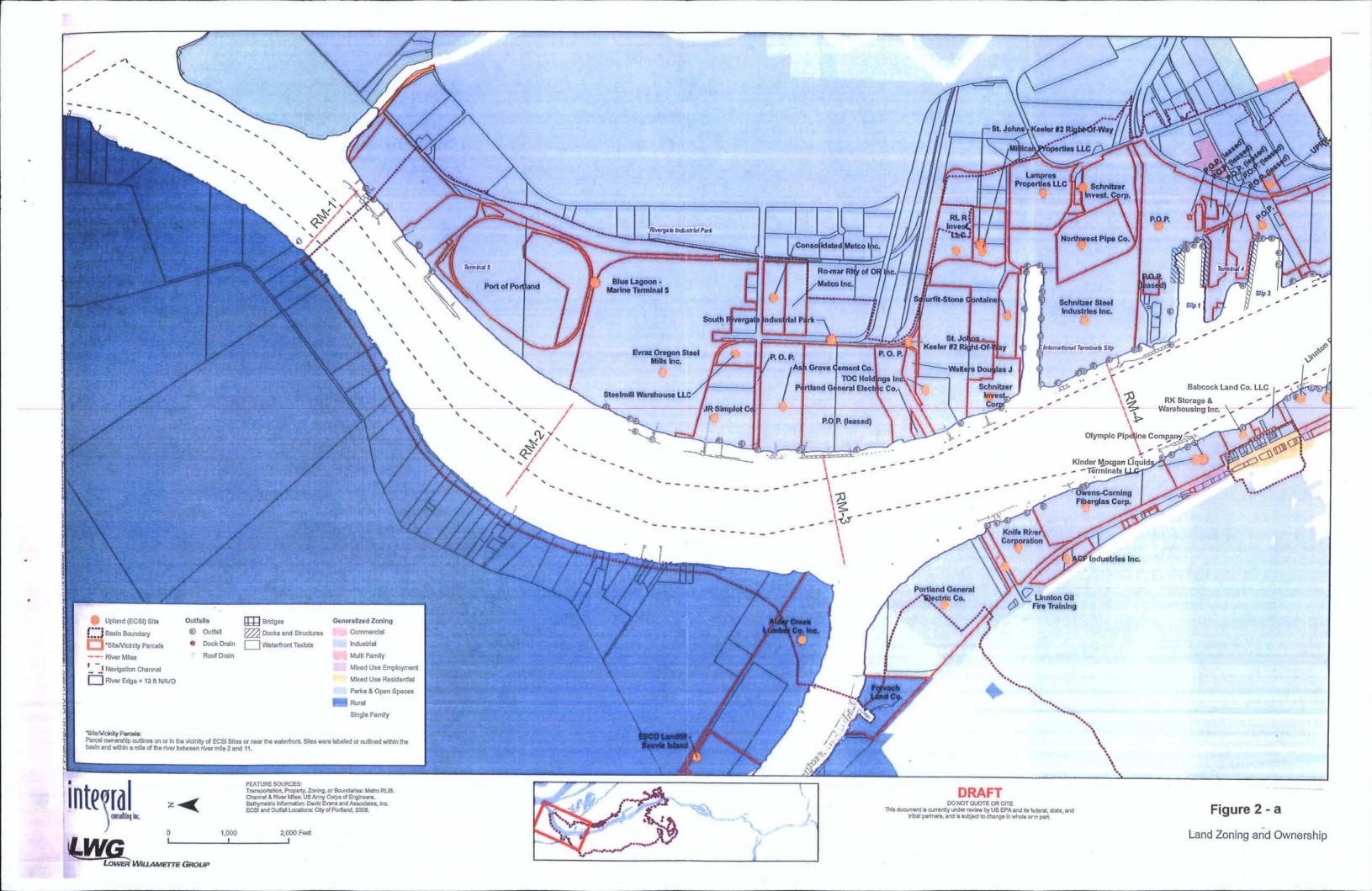
Outfall basin status of source identification

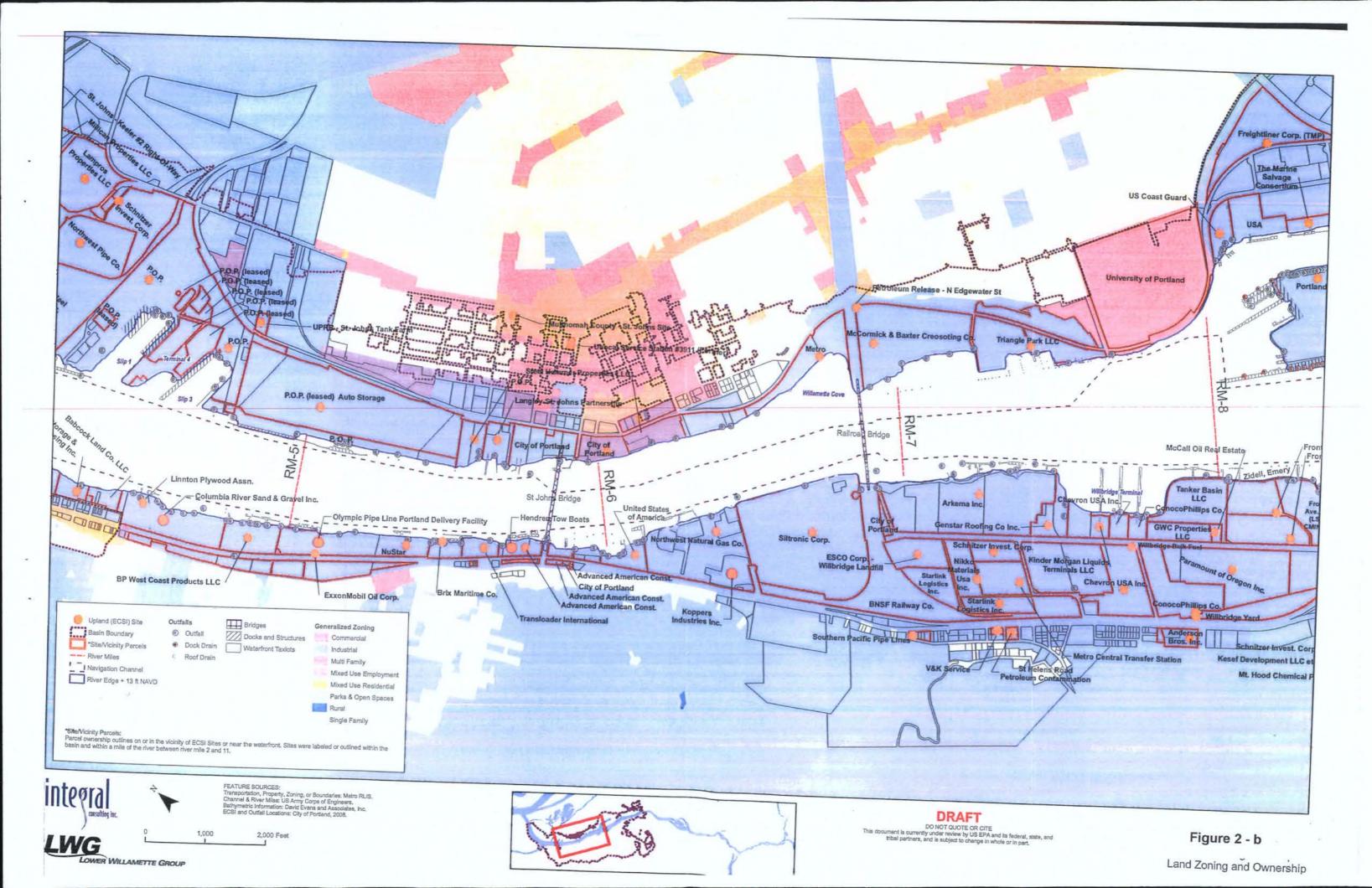
No Significant Sources in Basin and Insignificant or Incomplete Pathway

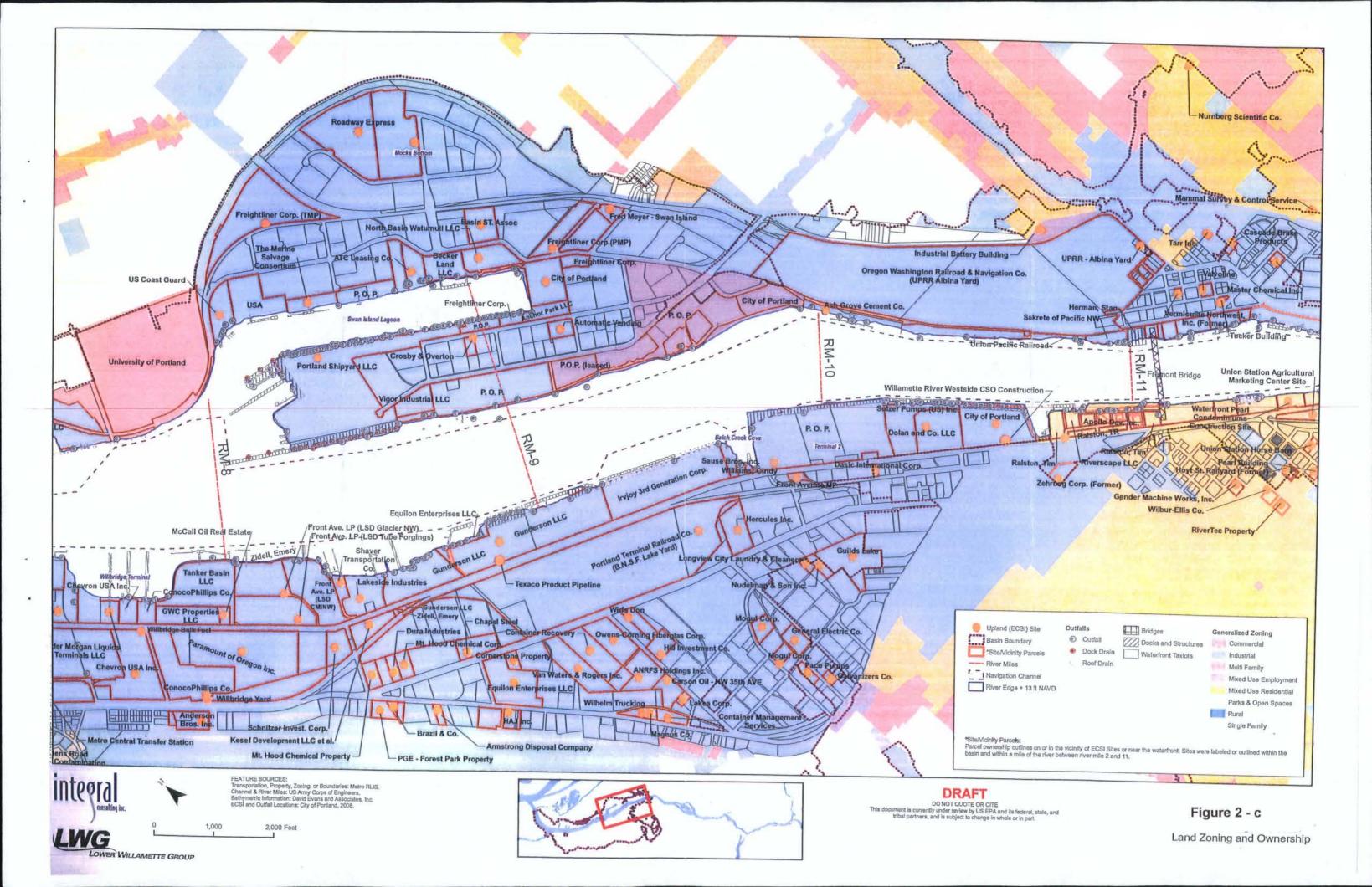
Bourse identification in Basin is Complete

Additional Source identification Needed or May be Needed in Basin









Update on Stormwater Source Control at the Portland Harbor Superfund Site

September 2010

Prepared by the Oregon Department of Environmental Quality



This document is posted on DEQ's web page at http://www.deq.state.or.us/lq/cu/nwr/PortlandHarbor/jointsource.htm

If you have questions or comments regarding the information in this report, please direct them to Karen Tarnow, Portland Harbor Stormwater Coordinator at DEQ (503-229-5988).

<u>tarnow.karen.e@deg.state.or.us</u>

1.0 Introduction

DEQ is responsible for controlling upland sources of contamination to Portland Harbor on a schedule that ensures cleanup of the river can proceed with minimal risk of recontamination. This document describes DEQ's strategy for achieving this objective for the stormwater pathway, the status of stormwater source control at upland sites and the timeline for completing this work. In addition, Attachment A describes a tool DEQ developed for evaluating stormwater data.

1.1 Potential Sources of Stormwater Contaminants

There are two types of contaminant sources at upland sites. One type of source is contaminated media (e.g., soil, groundwater, pavement, etc.) that results from historical releases of hazardous substances. This is sometimes called *legacy contamination*. Legacy contamination can be caused by legacy *contaminants* that have been banned for general use, such as PCBs and DDT, but can also be caused by contaminants currently in use, such as various metals and petroleum-related substances. We use the term "legacy" because most often this contamination resulted from past practices and/or releases.

The other type of contaminant source is a result of the day-to-day activities that take place at a site. Many kinds of activities have the potential to result in minor releases of contaminants, such as zinc released by the wear and tear on tires and brake pads, phthalates off-gassing from paints and PVC piping, and petroleum products in drips of oils, greases and fuels used for vehicles and machinery.

Effective stormwater source control is based upon an understanding of the types and sources of contamination at a site. This information is used to determine the appropriate tools to prevent or minimize the potential for contaminants to become entrained in stormwater runoff.

1.2 Preventing Stormwater Contamination

There are many programs and efforts underway that are designed to eliminate or control contaminant sources and minimize the potential for stormwater to come into contact with contaminants. These include stormwater permits and implementation of best management practices (BMPs), hazardous waste regulations, toxics use reduction initiatives, the City of Portland's Stormwater Management Manual and Green Streets initiatives, etc. These programs do the lion's share of the work of preventing stormwater contamination, and have been widely practiced for years and even decades in some instances. As a result, present-day stormwater discharges are *much* cleaner than in years past.

That said, there are certain sites where a higher level of investigation, regulation and oversight may be needed to achieve source control objectives. This is the focus of DEQ's comprehensive stormwater strategy for Portland Harbor.

2.0 DEQ's Comprehensive Stormwater Strategy for Portland Harbor

DEQ's objectives for stormwater source control are (1) to identify and address stormwater discharges containing elevated contaminant concentrations, and (2) to ensure future stormwater discharges will not recontaminate harbor sediments. DEQ draws upon its Cleanup and Water Quality authorities to accomplish these objectives. This is how they are being applied:

2.1 Identify and address contaminated stormwater discharges¹

DEQ's Cleanup Program identifies and addresses sites with contaminated stormwater discharges to minimize the potential for contaminants to migrate to the river via the stormwater pathway. This approach involves consideration of several lines of evidence to determine where source control is needed and when it has been achieved. These procedures are described in DEQ's Guidance for Evaluating the Stormwater Pathway at Upland Sites (http://www.deq.state.or.us/lq/cu/stmwtrguidance.htm).

The guidance is currently being updated to clarify certain policies and procedures and to include a screening tool for stormwater data (see Attachment 1 for a description of the tool). The screening tool is used to help distinguish stormwater containing elevated contaminant concentrations from stormwater that represents "typical" industrial runoff. Elevated contaminant concentrations are an indication that contamination may be present at the site and that additional investigation and source control may be needed.

DEQ will issue a Stormwater Source Control Decision (SCD) when it determines that contaminant sources at the site have been controlled as necessary to minimize potential for contaminant migration to the river via stormwater discharge, and that the resulting discharge is not likely to contaminate in-river sediments.

Stormwater is a unique contaminant pathway for the Cleanup Program to address because releases of certain types of contaminants are *expected* to continue, at some level, due to the nature of industrial operations and other human activities. Whereas the Cleanup Program typically focuses on contaminated media (e.g., soil, sediment, groundwater), these ongoing, incidental releases are commonly managed through Water Quality programs and permits to ensure that stormwater discharges don't result in unacceptable environmental impacts.

For this reason, a Stormwater SCD from DEQ's Cleanup Program does not confer the same degree of finality as a SCD for other contaminant pathways (e.g., groundwater, bank erosion) or a No Further Action (NFA) determination. There is an expectation that appropriate stormwater management measures will continue to be implemented and that water quality regulations and programs will be applied as necessary to ensure adequate measures are being taken to achieve

¹ Some industrial sites operate under a stormwater permit that requires certain stormwater control measures. However, these permits do not address all of the contaminants that are most problematic in Portland Harbor and may not be sufficient to address the Portland Harbor cleanup goals. Therefore, a stormwater permit does not necessarily preclude the need for additional evaluation and source control.

environmental objectives. Thus, a Stormwater SCD from the Cleanup Program should be considered a milestone in the stormwater source control process rather than an endpoint.

2.2 Manage future stormwater discharges with Water Quality programs and permits

As mentioned above, there is a wide array of regulatory and non-regulatory programs that directly or indirectly help to minimize the potential for stormwater to come into contact with contaminants. Before cleanup of the river can proceed, there needs to be a high degree of confidence that these efforts, in total, sufficiently minimize the potential for stormwater discharges to recontaminate the harbor sediments. This requires an understanding of the load of contaminants being discharged into the river in spite of all the source control and stormwater management efforts, and the fate and transport of contaminants in the river.

This evaluation will depend in part on modeling and other analyses being conducted as part of the Portland Harbor Remedial Investigation/Feasibility Study (e.g., loading evaluation, modeling results, cleanup goals). Much of this information should be available, at least in draft form, by spring 2011. DEQ is also looking into simple recontamination models to complement these efforts.

If the evaluation determines that stormwater poses a recontamination risk, one or more of the following things may happen.

- a) DEQ could revisit certain SCDs and/or expand its source control evaluation efforts to include additional sites (i.e., those currently considered to be lower priority sites) with the goal of "ratcheting back" on the contaminant load being discharged into the river.
- b) DEQ could issue a more stringent industrial stormwater general permit², require additional facilities to obtain coverage under the general permit, and/or issue individual stormwater permits to facilities where a more protective permit is necessary to prevent recontamination.
- c) The City could improve or expand its stormwater pollution prevention efforts to better address the sources or drivers of recontamination risk.

The results of the evaluation will help DEQ determine which of these actions – or potentially other actions not listed above – are the most appropriate measures to take to minimize the recontamination risk. If additional actions are needed, the objective would be to have them implemented before or shortly after EPA issues the Record of Decision for Portland Harbor. After the Portland Harbor Record of Decision (ROD) is issued and Remedial Design begins, stormwater discharges within or adjacent to Sediment Management Areas may undergo additional scrutiny. If existing controls are found to be inadequate to prevent recontamination,

² Certain industry types are required to obtain an Industrial Stormwater General Permit from DEQ (aka the 1200Z permit, administered in Portland by the City's Bureau of Environmental Services). The permit creates a mechanism for providing ongoing oversight of stormwater management practices and evaluating the effectiveness of these practices. If the discharge cannot be adequately controlled by the 1200Z general permit, DEQ can require a facility to obtain a customized "individual" stormwater permit. Information on these permits and the industries required to obtain a permit can be found here: http://www.deq.state.or.us/wq/stormwater/industrial.htm DEQ's Water Quality Program is in the process of revising the 1200Z and expects to propose a revised permit in summer 2011. Once this permit is drafted, DEQ can begin to evaluate its effectiveness for Portland Harbor.

site-specific stormwater treatment technologies and/or customized stormwater permits may be required at sites of concern.

3.0 Timeline for Accomplishing Stormwater Source Control Objectives

Figure 1 shows an approximate timeline for DEQ to accomplish its source control objectives. With the possible exception of a small number of complex sites, DEQ expects to have stormwater source control completed by the time that EPA issues the Portland Harbor ROD.

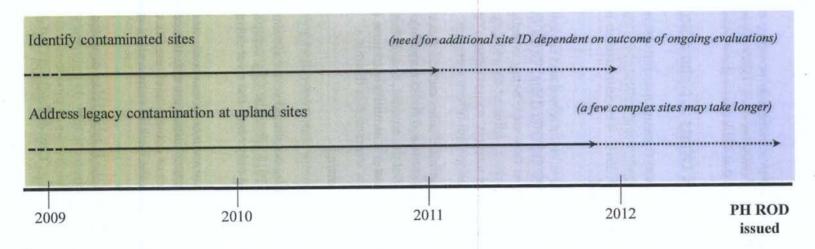
4.0 Status of Stormwater Source Control Efforts at Upland Sites

Table 1 lists all of the sites in DEQ's Environmental Cleanup Site Information (ECSI) database located within the Portland Harbor watershed boundary and indicates the status of stormwater source control efforts at each site as of September 2010. This information is also presented in Figure 2. A few notes regarding this status report:

- A number of ECSI sites shown on the map were investigated and remediated prior to the initiation of work on the Portland Harbor Superfund site. Since these sites did not undergo a stormwater evaluation at the time they were being investigated, DEQ reviewed the file information and adjacent in-river sediment data to determine whether additional evaluation was needed. As a result, some of these "closed" sites were asked to undertake source control evaluations but others were not.
- "Lower Priority Need for SCE To Be Determined" sites include those where there is evidence to suspect that contamination is present and could come into contact with stormwater or stormwater conveyances, but the amount, concentration and/or potential for contaminant migration in stormwater was unlikely to pose a significant threat and therefore additional evaluation is not warranted at this time.
- "Insignificant Pathway" sites include the following:
 - o sites that have no or very infrequent, minor stormwater discharges
 - o sites where stormwater discharges to the combined sewer system (or will discharge to the system by the end of 2011 when the City completes its reengineering of the system) and could only reach the river during an overflow event
 - sites where there is no evidence that stormwater would come into contact with contamination on the site (e.g., contaminants are subsurface and there is no potential for exposure to stormwater or contaminant migration to the river via infiltration into or advection along the backfill surrounding stormwater pipes)
- A small number of ECSI sites that fall within the Portland Harbor watershed boundary have not been depicted on the map because they do not represent true "sites." Examples include a few spills along highways or pipelines and ECSI sites that represent Study Areas rather than sites (e.g., City of Portland Outfalls; Portland Harbor Sediments).

Figure 1: Timeline for achieving stormwater source control in Portland Harbor.

Controlling sources:



Managing future discharges:

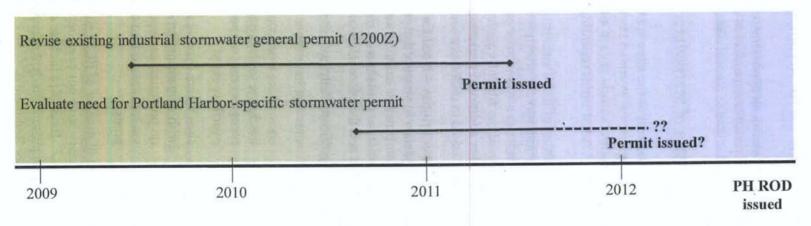


Table 1: Status of Stormwater Source Control Evaluations at ECSI Sites

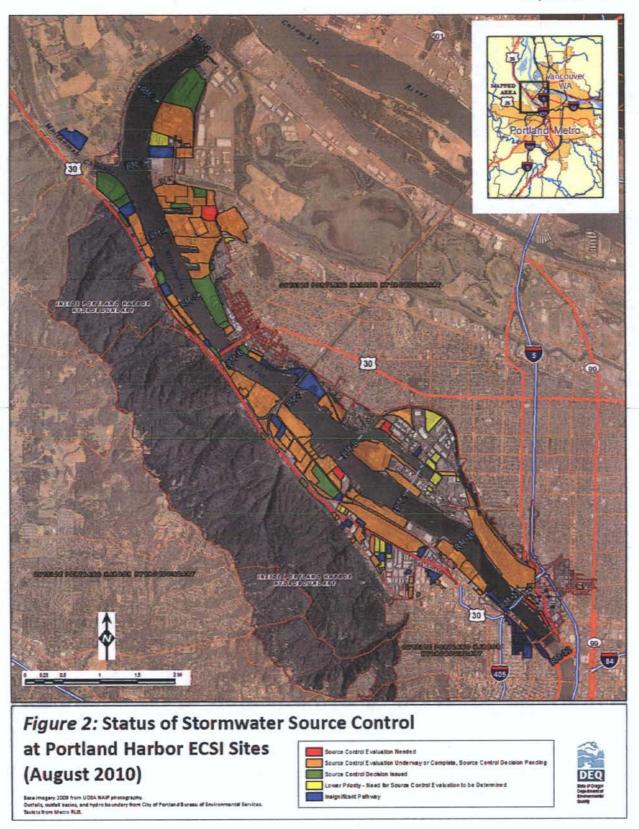
Stormwater SCE Needed (6)	ECSI#
Cargill (Albina River Lots)	9997
Glacier (Albina River Lots)	9998
Glacier NW [Front St.]	2378
Lampros Steel	2441
Ross Island (Albina River Lots)	9999
US Navy And Marine Reserve Center	5109
Stormwater SCE Underway (59)	all ada seed
Air Liquide/Schnitzer Investment - Doane Lake	395
Arkema	398
Boydstun Metal Works Inc	2362
Brix/Foss Maritime	2364
Burlington Northern Hub Center And Lake Yard	100
Calbag Metals - Nicolai	5059
Calbag Metals [Front St.]	2454
Centennial Mills	5136
Chevron Products Company	25
Chevron U.S.A., Inc.	1549
Christenson Oil	2426
Columbia American Plating	29
Conoco Phillips Tank Farm	177
Consolidated Metco, Inc.	3295
Container Management Services LLC	4784
Crawford Street	2363
ExxonMobile Oil Corporation	137
Fred Devine Diving & Salvage Inc	2365
reightliner, LLC	115
reightliner, LLC	2366
Galvanizers Company	1196
General Electric Ser Shop	4003
GS Roofing Products, Inc.	117
Gunderson Inc.	1155
Kinder Morgan Liquid Terminals LLC	1096
Coppers Industries, Inc.	2348
akeside Industries	2372
McCall Oil	134
Metro Central Transfer Station	1398
Mt. Hood Chemical Corporation	81
Northwest Natural Gas Company	84

Northwest Pipe Company	138
Oregon Steel Mills - Rivergate	141
Owens Corning - Linnton	1036
PacifiCorp Albina Riverlots	5117
Port of Portland - Terminal 1 North	3377
Port of Portland - Terminal 2	2769
Port of Portland - Terminal 4	272
Port of Portland - Terminal 4, Slip 1	2356
Portland Ship Yard [Cascade General And Port Properties]	271
Premier Edible Oils	2013
Rhone Poulenc	155
Schnitzer Steel	2355
Schnitzer Burgard Industrial Park	5324
Shell Oil Co Willbridge Plant	160
Shore Terminals LLC	1989
Siltronic [Wacker Siltronic Corporation]	183
Sulzer Pumps	1235
Texaco Portland Terminal	169
Time Oil	170
Triangle Park - North Portland Yard	277
Tube Forgings of America, Inc.	1239
Union Carbide Corp. [NW Container]	176
Univar [Van Waters and Rogers]	330
UPRR Albina Site	178
US Moorings [US Army COE]	1641
USCG Dock	1338
Wilhelm Trucking [Magnus]	69
Willbridge Yard	3395
Stormwater SCE Complete; Source Control Decision Pending (3)	Mit Lean E
Arco Bulk Terminal	1528
Mar Com, Inc South Parcel	2350
PGE - Forest Park Property	2406
Stormwater Source Control Decision Issued (16)	mustic of
ACF Industries	794
Anderson Bros. Property	970
BES Water Pollution Control Facility	2452
Blue Lagoon - Marine Terminal 5	1686
Chevron Asphalt	1281
Jefferson Smurfit Corporation	2371
Linnton Plywood Association	2373
Mar Com, Inc North Parcel	4797

Marine Finance Co.	2352
Oil Fire Training Ground	1189
Paco Pumps	146
PGE - Harborton Substation	2353
Port of Portland - Terminal 4 Auto Storage	172
Ro-Mar Transportation Systems Inc	2437
SFI, Inc.	5103
UPRR – St. Johns Tank Farm	2017
Lower Priority - Need for Stormwater S	CE TBD (18)
Ashland Chemical Inc	1076
Borden Chemical, Inc.	1277
Brazil & Co.	1026
Carson Oil Co., Inc.	1405
Color Magic Inc	1328
Container Recovery, Inc.	4015
Dura Industries Inc	111
End of Swan Island Lagoon	3901
Estey Corporation	1430
Federal Express	3807
Fred Meyer - Swan Island	44
GI Trucking	1840
Jinkz Corp	2423
JR Simplot	3343
Office Depot	260
Portland Container Repair Corporation	2375
Santa Fe Pacific Pipelines	2104
Trumball Asphalt [Owens Corning Yeon]	1160
Insignificant Pathway - Minimal stormwa	77 (
Ash Grove Cement - Rivergate Plant	4696
Goldendale Aluminum Company	2440
GPC Linnton	333
Hercules Incorporated	988
Nudelman & Son Inc.	966
Port of Portland Tract O Property	5307
Union Station - Track #5	1414
Willamette Cove	2066
significant Pathway - Stormwater captured/to be captured	
Babcock Land Company	2361
Cascade Brake Products	1019
RK Storage And Warehousing	2376
Unocal SS 3911	1593

ANFRS Holdings/ABF Freight Systems	1820
Greenway Recycling	4655
Penske Truck Leasing	5055
Naterfront Pearl Cond. Construction Site	4535
Vestinghouse	4497
Insignificant Pathway - No evidence of contamina	ted stormwater (20)
Albers Mill Property	4590
Chapel Steel Inc	4920
Dasic International Corp.	110
Eastman Chemical Company	135
SCO Corp Willbridge Landfill	397
Front Avenue Mp	4008
Glacier Northwest Inc. Linnton	2351
Gould, Inc	49
Hoyt St. Railyard (Former)	1080
ndustrial Battery Building	935
Kittridge Distribution Center	2442
Master Chemical Inc.	1302
Mogul Corp.	1307
Pearl Building	4960
Port of Portland - Terminal 1 South	2642
Schnitzer Investment - Near NW 35th And Yeon	2424
Shaver Transportation Co	2377
Transloader International Company, L.L.C.	2367
Tucker Building	3036
Valvoline Inc	3215
No pathway for site COIs (e.g., groundwater site	e; capped sites) (16)
ESCO Landfill – Sauvie Island	4409
Guilds Lake - NW Industrial St.	404
Hoyt St Train Yard - Parcel 1	1624
King-Ries Property	4560
Longview City Laundry & Cleaners Inc	1395
Lynden Farms	4461
McCormick & Baxter Creosoting Co.	74
Morse Bros.	2370
ODA Laboratory Services	1962
PGE - Substation E	3976
St. Johns - Keeler #2 Right-of-Way	1067

Union Station - Parcel B South	1885
Union Station Horse Barn	2407
USPS - Fleet Operations	2183
WR Grace Co.	2761
Not a true site - Not shown on m	nap (12)
City of Portland Outfalls	2425
Crosby & Overton	877
Diesel Release - N Edgewater	1345
Doane Lake Study Area	36
Forest Park Drainage Tunnel, Former	3301
Mocks Bottom	1306
Portland Delivery Facility	3342
Portland Harbor Sediments	2068
South Rivergate Industrial Park	2980
St Helens Road Petroleum Contamination	2630
Texaco Product Pipeline	2117
Union Chemical	329
Outside Portland Harbor Watershed - Not :	shown on map (8)
Alder Creek Lumber Co., Inc.	2446
Flint Inc.	1753
Graphic Arts Center	187
Harsh Investments	878
Klix Corp of Oregon	1075
Multnomah County - St. Johns Site	2421
ODEQ Clean Up Sylvan Cleaners Site	1897
Zehrung	187



A more detailed version of this map, showing ECSI site numbers and outfall locations, will be available on DEQ's website at http://www.deq.state.or.us/lg/cu/nwr/PortlandHarbor/jointsource.htm

Attachment 1: Evaluating Stormwater Data

DEQ developed a series of charts to assist with the evaluation of stormwater data. The charts were created using contaminant concentration data from stormwater samples collected at Portland Harbor-area industrial sites. They are intended to be used as a screening tool for distinguishing "typical" industrial stormwater from stormwater containing potentially elevated contaminant concentrations. The charts will be presented in Appendix E of DEQ's *Guidance for Evaluating the Stormwater Pathway and Upland Sites* and will be available on DEQ's website in October 2010 at: http://www.deq.state.or.us/lq/cu/nwr/PortlandHarbor/stormwater.htm.

1.0 Basis for Using the Charts as a Screening Tool

The use of these charts as a screening tool is based on the premise that many kinds of industrial materials and activities have the potential to result in minor releases of contaminants, such as petroleum products in drips of oils, greases and fuels used for vehicles and machinery, phthalates off-gassing from paints and PVC piping, and zinc from galvanized building materials. Off-site sources, including highway traffic, operations at neighboring sites and atmospheric deposition, can also contribute to the contaminant load in stormwater runoff from a site.

As a result, industrial stormwater is likely to contain a somewhat predictable list of contaminants within a predictable concentration range even when good stormwater management practices are being implemented. If contaminant concentrations exceed these ranges, DEQ considers this to be a potential indicator of an uncontrolled source of contaminants at the site.

Some might question this rationale because all of the data used to create the charts were collected at contaminated or suspect sites and therefore would be expected to be more contaminated than typical industrial stormwater. DEQ considered this issue but considers it to be immaterial for two reasons. First, contaminated sites are likely to be contaminated by a few site-specific chemicals, and therefore stormwater would only show elevated concentrations of those specific contaminants and only if they were exposed to stormwater. All of the other contaminants would be expected to be present in stormwater at "typical" concentrations.

Second, as a screening tool, the charts are simply intended to identify sites that "stand out from the crowd." This information helps DEQ determine the need for additional evaluation or source control at a site. Since the charts are not used for directly evaluating potential waterbody impacts from the stormwater, the upper and lower bounds of the "typical" concentration range are not particularly relevant.

Due to the highly variable nature of stormwater, interpretations made using these charts should only be considered in the context of other lines of evidence and should not be presumed to provide conclusive evidence of the presence or absence of contamination at a site.

2.0 Chart Development

The charts were created using stormwater data from industrial sites in the Portland Harbor area of the Willamette River (River Mile 1.9 - 11.8). The largest single dataset was developed by the

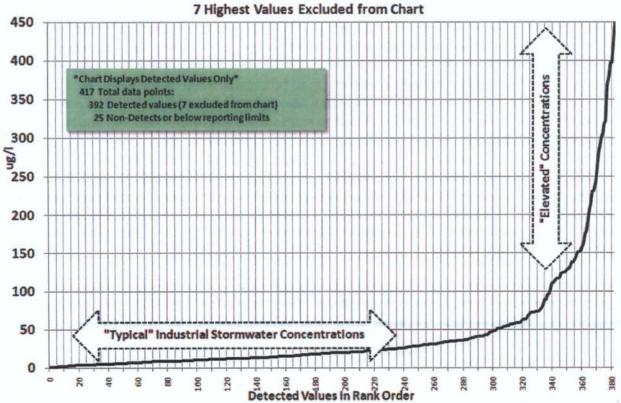
Lower Willamette Group (LWG) in the course of their Round 3 sampling events for the Portland Harbor Remedial Investigation. This dataset includes stormwater data collected at 21 heavy industrial locations during 2007 and 2008. The rest of the data was submitted to DEQ by ECSI sites.

The charts present the stormwater data but do not specify the sample locations or methods. This information is only available in the original data reports. In almost all instances, stormwater samples were collected under a DEQ- or EPA-approved workplan. Both grab sample and composite sample data are included in the charts.

To create the charts, all of the detected values for a given contaminant were compiled and organized in rank order (i.e., lowest to highest concentration; charts include J-flagged/estimated values). The data were then plotted on a chart. The chart's X axis is the rank of each data point and the Y axis is the concentration. Information on the number of non-detected values for each contaminant is also provided on the chart.

An example of a typical chart for a stormwater contaminant is provided below. In most charts there is a definitive "knee" in the curve and the majority of data points fall within the relatively flat portion of the curve below the knee.

Stormwater Contaminant X at Portland Harbor Heavy Industrial Sites



3.0 Screening Stormwater Data Using the Charts

The use of these charts as a screening tool is based on the assumption that the lower, flatter portion of the curve represents the contaminant concentration range that is typical of stormwater from Portland Harbor industrial sites. Consequently, when one or more contaminants are present at significantly higher concentrations (i.e., "elevated" concentrations represented by the steeper portion of the curve) it is an indicator that additional investigation and/or source control may be needed.

To evaluate stormwater data from a specific site, determine where the contaminant concentrations fall along the curve on the relevant chart.

- Concentrations falling within the lower/flatter portion of the curve suggest that
 stormwater discharges are not being unusually impacted by contaminants at the site and
 are therefore representative of "typical" industrial stormwater for Portland Harbor sites.
 However, this interpretation should not be considered to be a conclusive line of evidence.
 A determination that no additional source control or evaluation is necessary should be
 corroborated by other lines of evidence.
- Concentrations falling within the **upper/steeper portion of the curve** are an indication that uncontrolled contaminant sources may be present at the site and additional evaluation and/or source control measures may be warranted. The objective would be to determine the source(s) of the elevated concentrations and, based upon that, whether and what types of source control measures are needed.

4.0 Interpreting the Results

The screening results need to be evaluated based upon the characteristics of the site. Some sites can be expected to have higher concentrations of certain types of contaminants simply as a result of the type of operations (e.g., phthalates associated with painting activities, PAHs associated with heavy equipment and fueling). Slightly higher concentrations of specific contaminants might be considered to be "normal" at these sites but indicate potential contamination at others.

However, "normal" is not the same as acceptable. As stated above, these charts are used for identifying potentially contaminated sites and helping to guide source control evaluations. They are not designed to be used for evaluating the potential waterbody impacts of stormwater discharges.

An additional consideration when evaluating stormwater data is whether the data-are likely to be representative of typical stormwater discharges from the site. Stormwater samples taken from the same location can show widely varying concentrations depending on the duration and intensity of the storm events that were sampled, whether the sample was collected early or late in the storm, the length of the dry period preceding the storms, and the activities occurring at the site since the previous storm event. This should be considered when determining how much weight to apply to stormwater data in the course of a stormwater evaluation and/or whether additional data is needed to support a decision.